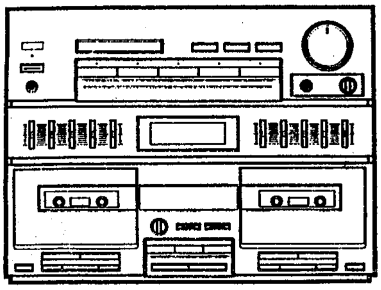
**PIONEER®**
*The Art of Entertainment*

# Service Manual



**ORDER NO.**
**ARP2170**

## STEREO DOUBLE CASSETTE DECK AMPLIFIER

# DC-Z74

### DC−Z74 HAS THE FOLLOWING :

| Type | Power Requirement | Remarks |
|---|---|---|
| SD | AC110V, 120V−127V, 220V, 240V (Switchable) | |
| YPW | AC240V only | |

- **This manual is applicable to the DC−Z74/SD and YPW types.**
- **As to the YPW type, refer to pages 49−52.**
- **This product is a component of a system. As to the system composition, refer to the system manual.**
- **For adjustment refer to ADJUSTMENTS FOR XD−Z54T, XD−Z84T, DC−Z94, DC−Z84 and DC−Z74 (ARP2140).**

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# 1. EXPLODED VIEWS, PACKING AND PARTS LIST

*NOTES:*

- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

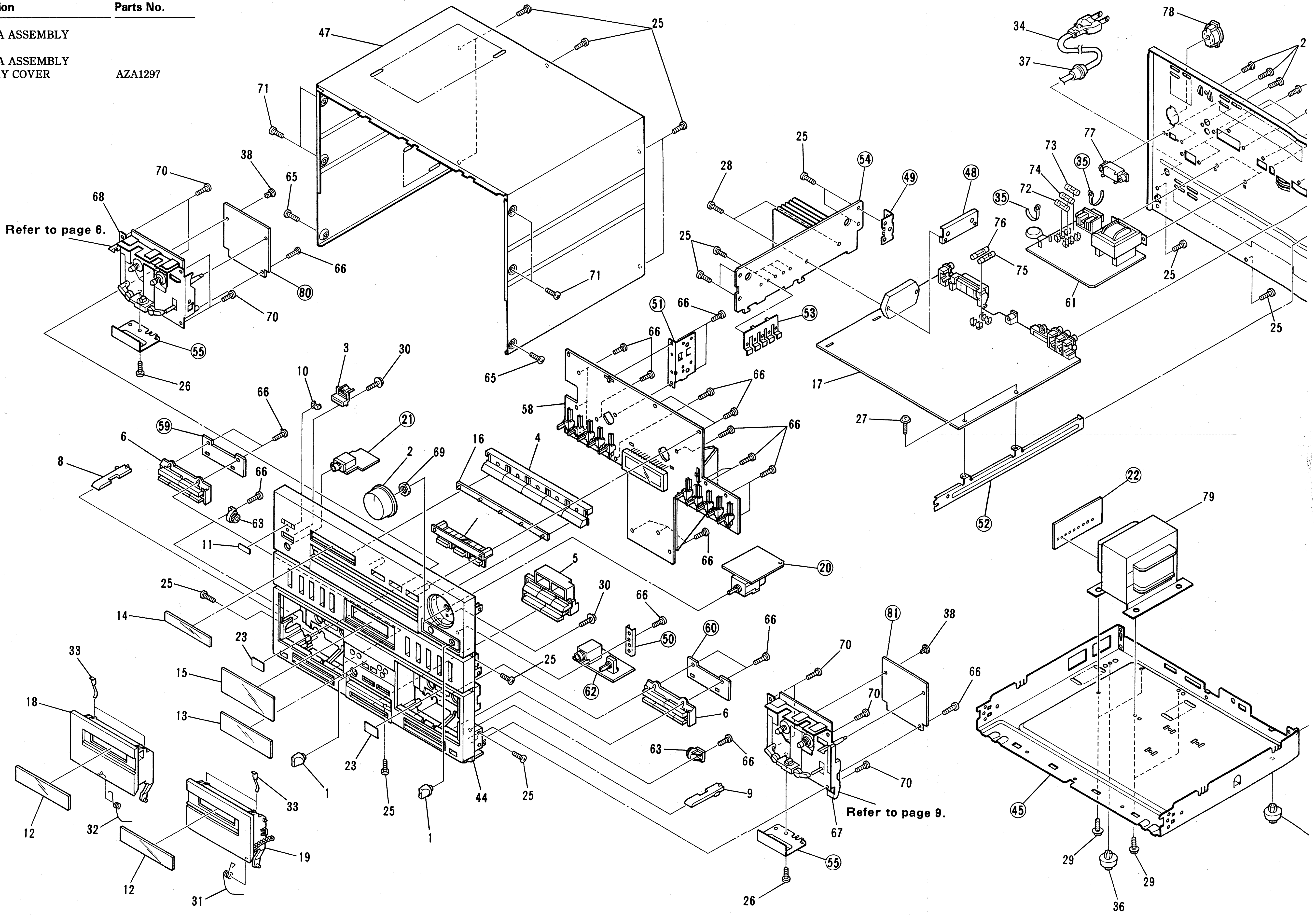
## 1.1 EXTERIOR AND PACKING

**Parts list of Exterior and Packing**

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | 1 | ROTARY KNOB (DOLBY NR) | AAB1136 |
| | 2 | VOL KNOB (VOLUME) | AAB1200 |
| | 3 | POWER BUTTON | AAD1674 |
| | 4 | FUNCTION BUTTON (PLS) | AAD1894 |
| | 5 | REC. COPY BUTTON (PLS) | AAD1895 |
| | 6 | DECK PLAY BUTTON (PLS) | AAD1896 |
| | 7 | AI BUTTON (SMART OPERATION, SURROUND & STEREO WIDE) | AAD1897 |
| | 8 | EJECT BUTTON L (PLS) | AAD1898 |
| | 9 | EJECT BUTTON R (PLS) | AAD1922 |
| | 10 | LENS (POWER IND.) | AAK1800 |
| | 11 | FILTER (REMOTE SENSOR) | AAK1812 |
| | 12 | DECORATIVE PLATE (DOOR) | AAK2065 |
| | 13 | DECORATIVE PLATE A (DECK) | AAK2067 |
| | 14 | AI DECORATIVE PLATE | AAK2068 |
| | 15 | DECORATIVE PLATE (GEQ) | AAK2069 |
| | 16 | INDICATOR LENS | AAK2075 |
| ◉ | 17 | AF ASSEMBLY | AWZ3335 |
| | 18 | CASSETTE DOOR (R) | AAN1250 |
| | 19 | CASSETTE DOOR (L) | AAN1251 |
| | 20 | VR ASSEMBLY | |
| | 21 | HEAD PHONE ASSEMBLY | |
| | 22 | TRANS CONNECT ASSEMBLY | |
| | 23 | FABEL (PAPER) | AAX1301 |
| | 24 | SCREW | ABA−222 |
| | 25 | SCREW | ABA−298 |
| | 26 | SCREW (STEEL) | ABA1009 |
| | 27 | SCREW (STEEL) | ABA1011 |
| | 28 | SCREW | ABA1018 |
| | 29 | SCREW | ABA1082 |
| | 30 | SCREW (STEEL) | ABA1095 |
| | 31 | DOOR SPRING L | ABH1068 |
| | 32 | DOOR SPRING R | ABH1069 |
| | 33 | KEEP PLATE | ABK1016 |
| ⚠ | 34 | AC POWER CORD | ADG1051 |
| | 35 | NYLON BINDER | |
| | 36 | LEG ASSEMBLY | AEC−847 |
| | 37 | STRAIN RELIEF | AEC−882 |
| | 38 | NYLON RIVET | AEC1160 |
| | 39 | DRY CELL BATTERY (R03, AAA) | |
| | 40 | FRONT PAD L, R | AHA1404 |
| | 41 | REAR PAD L, R | AHA1405 |
| | 42 | PACKING CASE | AHD1964 |
| | 43 | SHEET | |
| | 44 | FRONT PANEL | AMB1740 |
| | 45 | CHASSIS | |
| | 46 | REAR PANEL | |
| | 47 | BONNET | ANE1271 |
| | 48 | PACK HOLDER | |
| | 49 | HEAT SINK HOLDER B | |
| | 50 | PRESSURE METAL | |
| | 51 | HEAT SINK HOLDER A | |
| | 52 | PCB HOLDER | |
| | 53 | HOLDER | |
| | 54 | HEAT SINK | |
| | 55 | SHIELD PLATE (MECHA) | |
| | 56 | OPERATING INSTRUCTIONS (ENGLISH) | ARB1278 |
| | 57 | OPERATING INSTRUCTIONS (SPANISH) | ARC1232 |
| ◉ | 58 | DISPLAY ASSEMBLY | AWZ3409 |
| | 59 | 1 MECHA SW ASSEMBLY | |
| | 60 | 2 MECHA SW ASSEMBLY | |
| ◉ | 61 | SUB TRANS ASSEMBLY | AWR1058 |
| | 62 | MIC ASSEMBLY | |
| | 63 | DAMPER ASSEMBLY | AXA1008 |
| | 64 | REMOTE CONTROL UNIT (CU−DC021) | AXD1184 |
| | 65 | SCREW | BBZ30P080FZK |
| | 66 | SCREW | BPZ26P080FMC |
| | 67 | 2 MECHA UNIT | EXK2010 |
| | 68 | 1 MECHA UNIT | EXK2020 |
| | 69 | NUT | NK90FUC |
| | 70 | SCREW | VPZ30P080FMC |
| | 71 | SCREW | VPZ30P080FZK |
| ⚠ | 72 | FUSE (T2.5A, FU101) | AEK−403 |
| ⚠ | 73 | FUSE (T1A, FU102) | AEK−402 |
| ⚠ | 74 | FUSE (T1A, FU103) | AEK−402 |
| ⚠ | 75 | FUSE (T800mA, FU151) | AEK−031 |
| ⚠ | 76 | FUSE (T800mA, FU152) | AEK−031 |
| ⚠ | 77 | VOLTAGE SELECTOR (S101) | AKX1004 |
| ⚠ | 78 | VOLTAGE SELECTOR (S102) | AKX−507 |
| ⚠ | 79 | POWER TRANSFORMER (T102) | ATS1315 |

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | 80 | 1 MECHA ASSEMBLY | |
| | 81 | 2 MECHA ASSEMBLY | |
| | 82 | BATTERY COVER | AZA1297 |

## Exterior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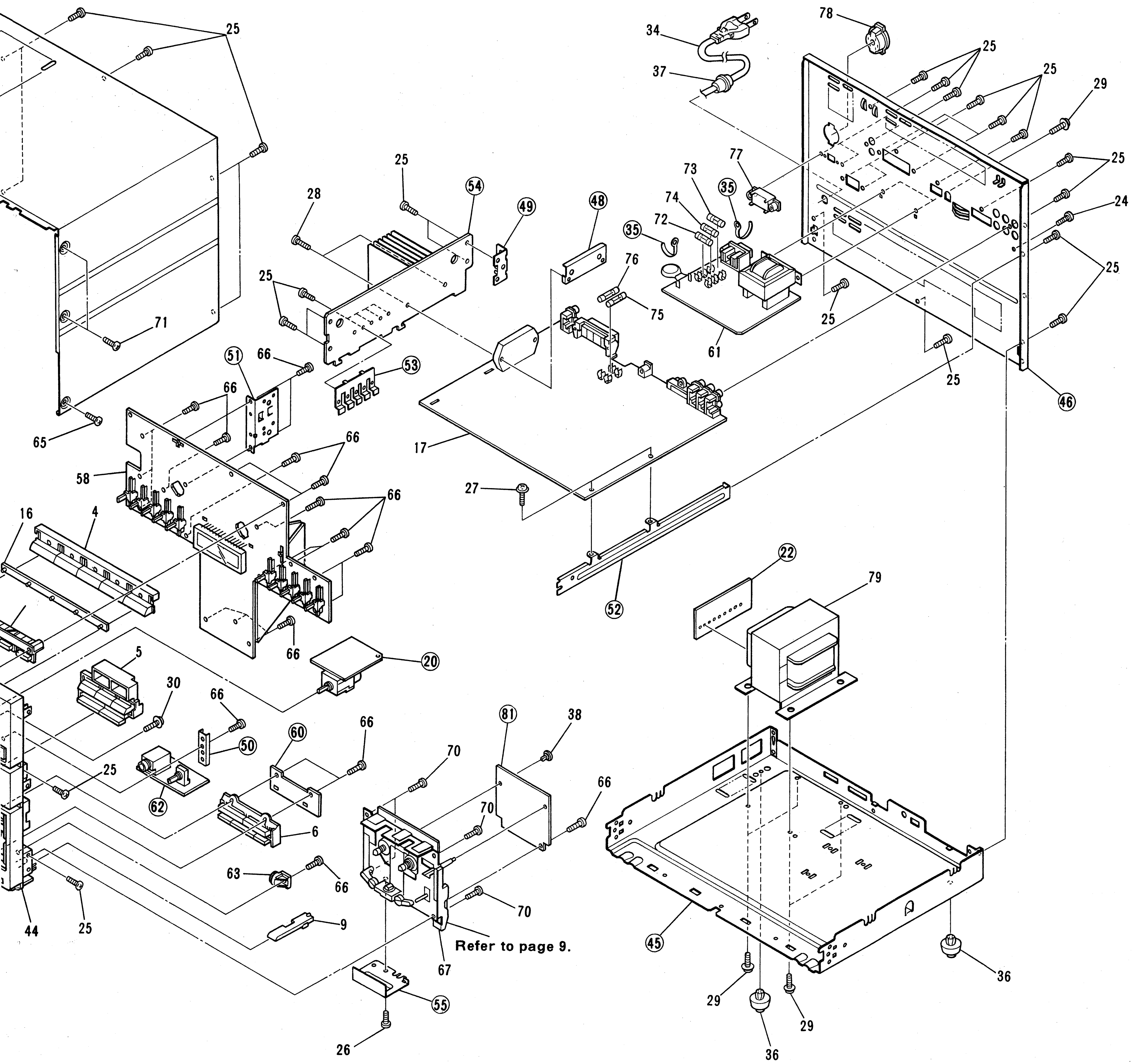
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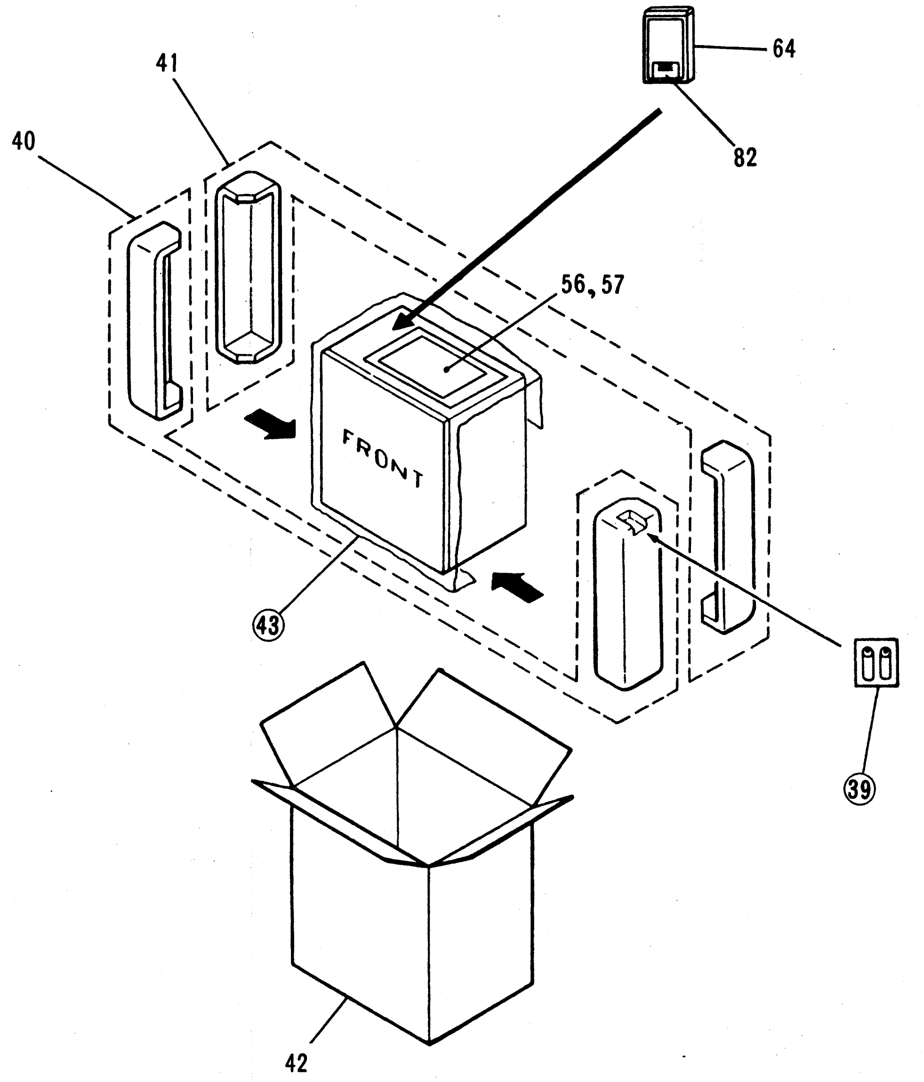
## Packing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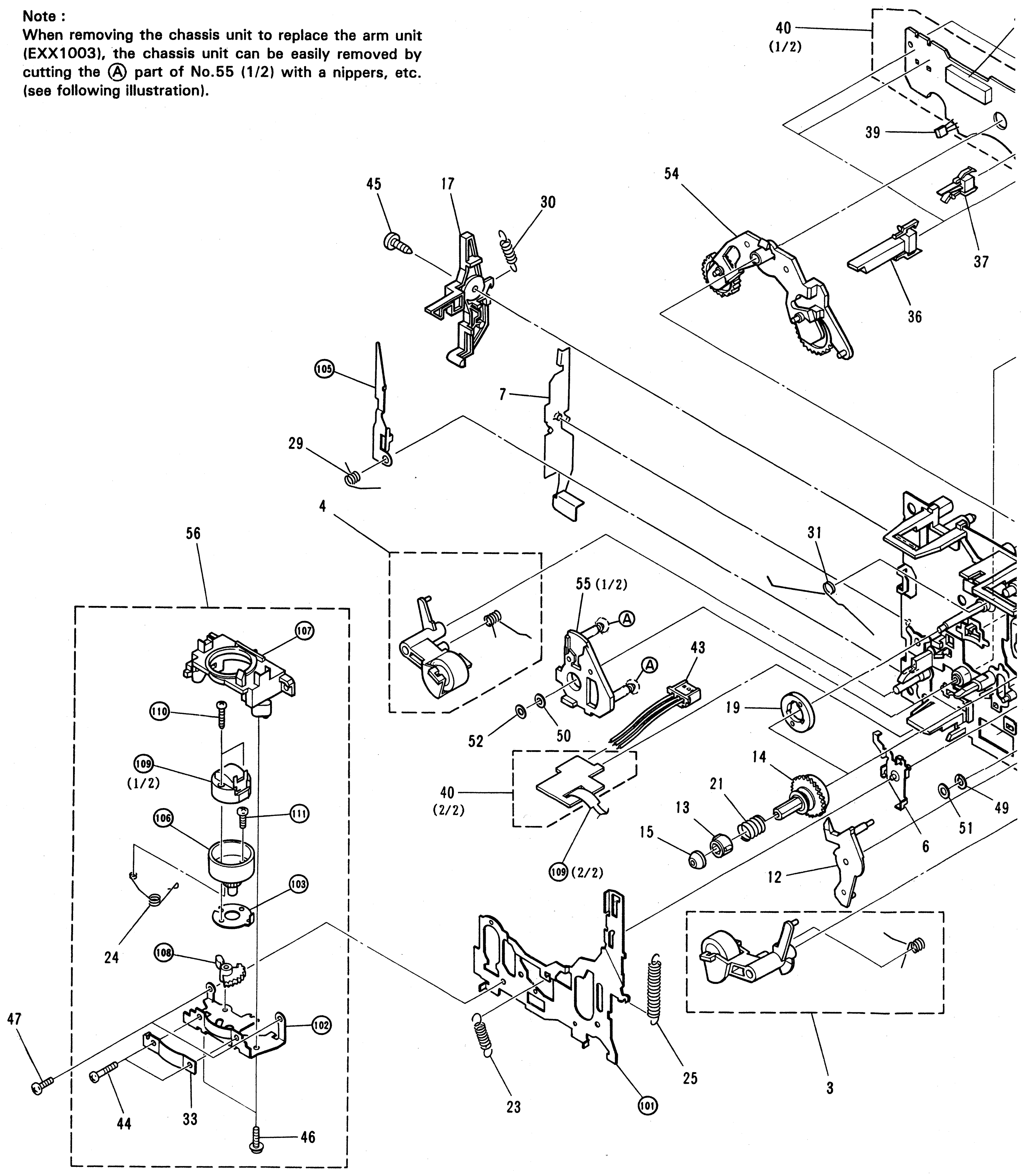
42

## 1.2 1 MECHA UNIT (EXK2020)

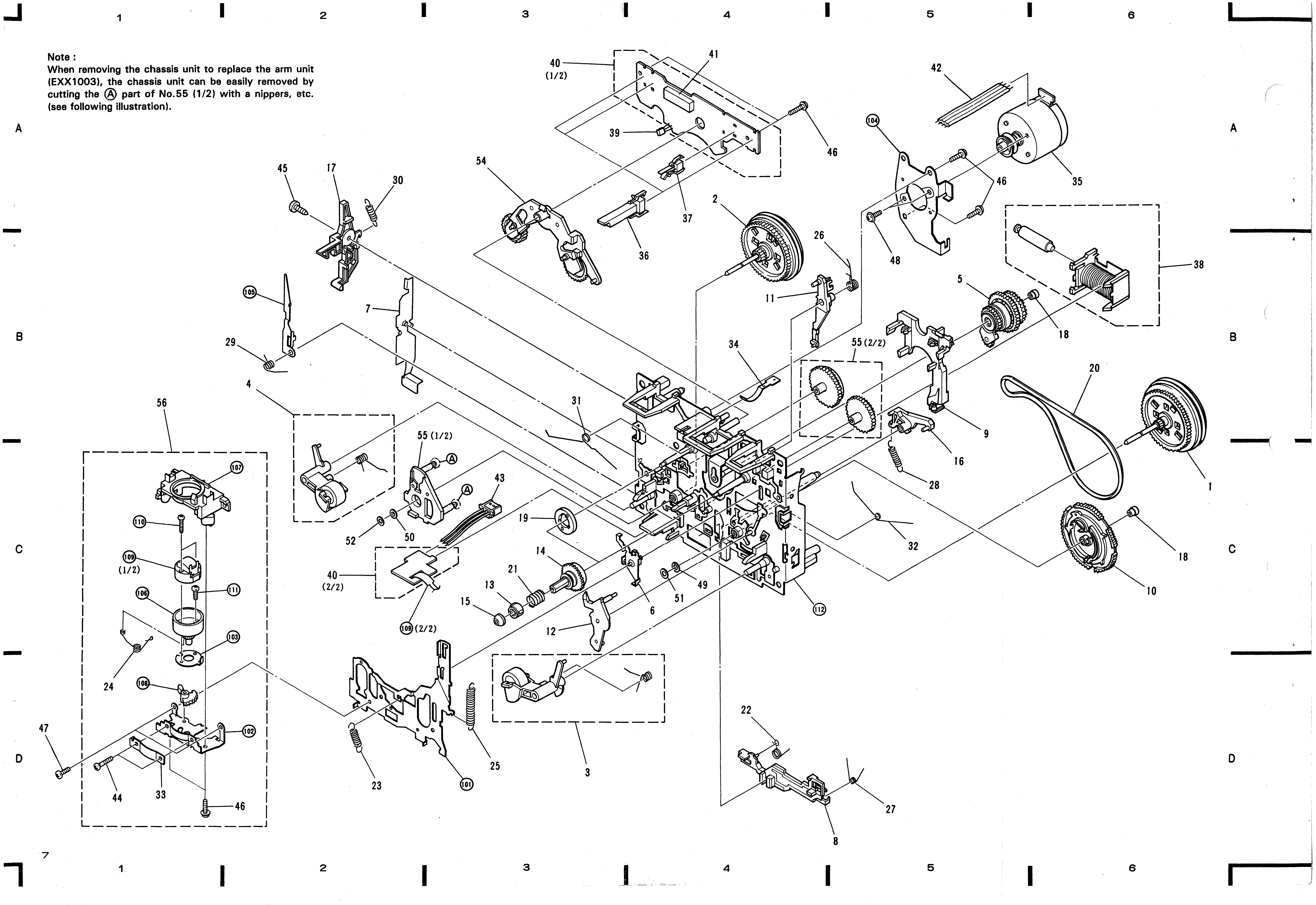
**Parts list of 1 Mecha unit**

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | 1 | FLYWHEEL UNIT (FWD) | EXA1102 |
| | 2 | FLYWHEEL UNIT (RVS) | EXA1103 |
| | 3 | ROLLER UNIT (FWD) | EXA1104 |
| | 4 | ROLLER UNIT (RVS) | EXA1105 |
| | 5 | LIMITER UNIT | EXA1106 |
| | 6 | LEVER UNIT | EXA1107 |
| | 7 | ARM | AZN2063 |
| | 8 | NR LEVER | ENV1155 |
| | 9 | BRAKE | ENV1157 |
| | 10 | CAM GEAR | ENV1158 |
| | 11 | LOCK ARM | ENV1159 |
| | 12 | NR ARM | ENV1163 |
| | 13 | REEL COLLAR | ENV1164 |
| | 14 | REEL | ENV1170 |
| | 15 | REEL BUSH | ENV1178 |
| | 16 | ARM | ENV1181 |
| | 17 | ARM | AZN2069 |
| | 18 | BUSH | ENV1184 |
| | 19 | MAGNET | ENV1185 |
| | 20 | BELT | ENT1015 |
| | 21 | SPRING | EBH1201 |
| | 22 | SPRING | EBH1202 |
| | 23 | SPRING | EBH1203 |
| | 24 | SPRING | EBH1204 |
| | 25 | SPRING | EBH1208 |
| | 26 | SPRING | EBH1209 |
| | 27 | SPRING | EBH1210 |
| | 28 | SPRING | EBH1211 |
| | 29 | SPRING | EBH1255 |
| | 30 | SPRING | EBH1213 |
| | 31 | SPRING | EBH1220 |
| | 32 | SPRING | EBH1256 |
| | 33 | SPRING | EBL1013 |
| | 34 | SPRING | EBL1014 |
| | 35 | MOTOR UNIT | EXA1108 |
| | 36 | SWITCH (Detect) | ESN1003 |
| | 37 | SWITCH (Mode) | ESN1004 |
| | 38 | SOLENOID | EXP1005 |
| | 39 | HALL IC | DN6847SE |
| | 40 | P.C.BOARD | ENX1002 |
| | 41 | CONNECTOR | EKS1013 |
| | 42 | LEAD WIRE | EDD1003 |
| | 43 | CONNECTOR | EDE1009 |
| | 44 | SCREW | EBA1020 |
| | 45 | SCREW | EBA1021 |
| | 46 | SCREW (M2×8) | ATZ20P080FMC |
| | 47 | SCREW | BSZ20P050FMC |
| | 48 | SCREW | PMS26P025FCU |
| | 49 | WASHER | EBF1008 |
| | 50 | WASHER | EBF1009 |
| | 51 | WASHER | EBF1010 |
| | 52 | WASHER | EBF1011 |
| | 53 | ··············· | |
| | 54 | ARM UNIT | EXX1002 |
| | 55 | ARM UNIT | EXX1003 |
| | 56 | P HEAD ASSEMBLY | EXX1005 |
| | 101 | HEAD BASE | |
| | 102 | BRACKET | |
| | 103 | PLATE | |
| | 104 | BRACKET | |
| | 105 | ARM | |
| | 106 | HOLDER | |
| | 107 | HOLDER | |
| | 108 | GEAR | |
| | 109 | P HEAD UNIT | |
| | 110 | SCREW | |
| | 111 | SCREW | |
| | 112 | CHASSIS UNIT | |

Note :
When removing the chassis unit to replace the arm unit (EXX1003), the chassis unit can be easily removed by cutting the Ⓐ part of No.55 (1/2) with a nippers, etc. (see following illustration).



**Note :**
When removing the chassis unit to replace the arm unit (EXX1003), the chassis unit can be easily removed by cutting the Ⓐ part of No.55 (1/2) with a nippers, etc. (see following illustration).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55 (2/2)
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55 (1/2)
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Ⓐ
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16
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⑩⑦
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⑩⑨
(1/2)
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(2/2)
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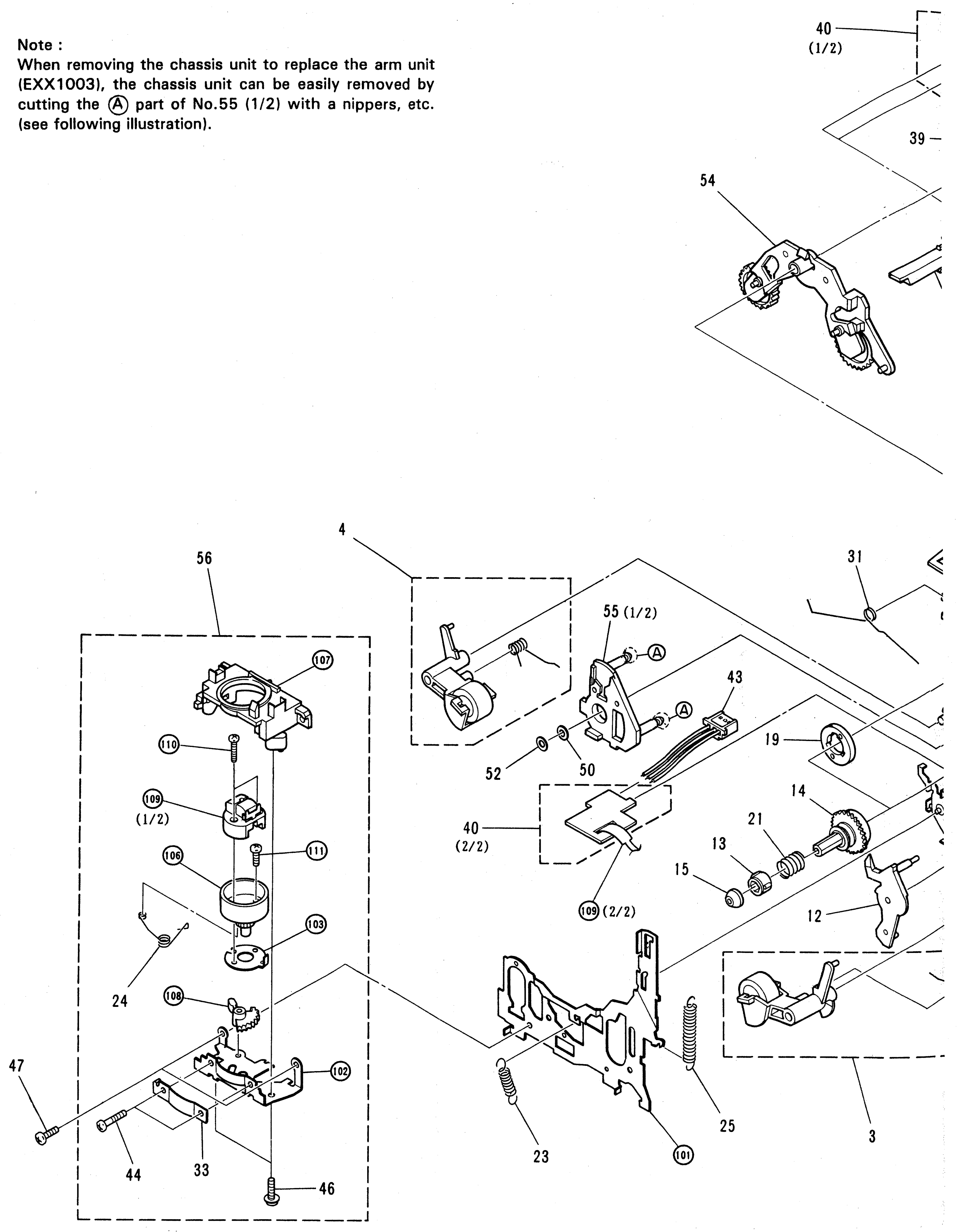
49
6
12
10
⑪①
⑩⑥
⑩③
⑪②
⑩⑨ (2/2)
24
⑩⑧
3
22
47
⑩②
⑩①
25
23
44
33
46
27
8

## 1.3 2 MECHA UNIT (EXK2010)

**Parts list of 2 Mecha unit**

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | 1 | FLYWHEEL UNIT (FWD) | EXA1102 |
| | 2 | FLYWHEEL UNIT (RVS) | EXA1103 |
| | 3 | ROLLER UNIT (FWD) | EXA1104 |
| | 4 | ROLLER UNIT (RVS) | EXA1105 |
| | 5 | LIMITER UNIT | EXA1106 |
| | 6 | LEVER UNIT | EXA1107 |
| | 7 | ARM | AZN2064 |
| | 8 | NR LEVER | ENV1155 |
| | 9 | BRAKE | ENV1157 |
| | 10 | CAM GEAR | ENV1158 |
| | 11 | LOCK ARM | ENV1159 |
| | 12 | NR ARM | ENV1163 |
| | 13 | REEL COLLAR | ENV1164 |
| | 14 | REEL | ENV1170 |
| | 15 | REEL BUSH | ENV1178 |
| | 16 | ARM | ENV1181 |
| | 17 | ARM | AZN2070 |
| | 18 | BUSH | ENV1184 |
| | 19 | MAGNET | ENV1185 |
| | 20 | BELT | ENT1015 |
| | 21 | SPRING | EBH1201 |
| | 22 | SPRING | EBH1202 |
| | 23 | SPRING | EBH1203 |
| | 24 | SPRING | EBH1204 |
| | 25 | SPRING | EBH1208 |
| | 26 | SPRING | EBH1209 |
| | 27 | SPRING | EBH1210 |
| | 28 | SPRING | EBH1211 |
| | 29 | SPRING | EBH1254 |
| | 30 | SPRING | EBH1213 |
| | 31 | SPRING | EBH1220 |
| | 32 | SPRING | EBH1256 |
| | 33 | SPRING | EBL1013 |
| | 34 | SPRING | EBL1014 |
| | 35 | MOTOR UNIT | EXA1108 |
| | 36 | SWITCH (Detect) | ESN1003 |
| | 37 | SWITCH (Mode) | ESN1004 |
| | 38 | SOLENOID | EXP1005 |
| | 39 | HALL IC | DN6847SE |
| | 40 | P.C.BOARD | ENX1002 |
| | 41 | CONNECTOR | EKS1012 |
| | 42 | LEAD WIRE | EDD1003 |
| | 43 | CONNECTOR | EDE1008 |
| | 44 | SCREW | EBA1020 |
| | 45 | SCREW | EBA1021 |
| | 46 | SCREW (M2×8) | ATZ20P080FMC |
| | 47 | SCREW | BSZ20P050FMC |
| | 48 | SCREW | PMS26P025FCU |
| | 49 | WASHER | EBF1008 |
| | 50 | WASHER | EBF1009 |
| | 51 | WASHER | EBF1010 |
| | 52 | WASHER | EBF1011 |
| | 53 | ............... | ............... |
| | 54 | ARM UNIT | EXX1002 |
| | 55 | ARM UNIT | EXX1003 |
| | 56 | R/P HEAD ASSEMBLY | EXX1004 |
| | 101 | HEAD BASE | |
| | 102 | BRACKET | |
| | 103 | PLATE | |
| | 104 | BRACKET | |
| | 105 | ARM | |
| | 106 | HOLDER | |
| | 107 | HOLDER | |
| | 108 | GEAR | |
| | 109 | R/P HEAD UNIT | |
| | 110 | SCREW | |
| | 111 | SCREW | |
| | 112 | CHASSIS UNIT | |

Note :
When removing the chassis unit to replace the arm unit (EXX1003), the chassis unit can be easily removed by cutting the Ⓐ part of No.55 (1/2) with a nippers, etc. (see following illustration).



Note :
When removing the chassis unit to replace the arm unit (EXX1003), the chassis unit can be easily removed by cutting the Ⓐ part of No.55 (1/2) with a nippers, etc. (see following illustration).

No.
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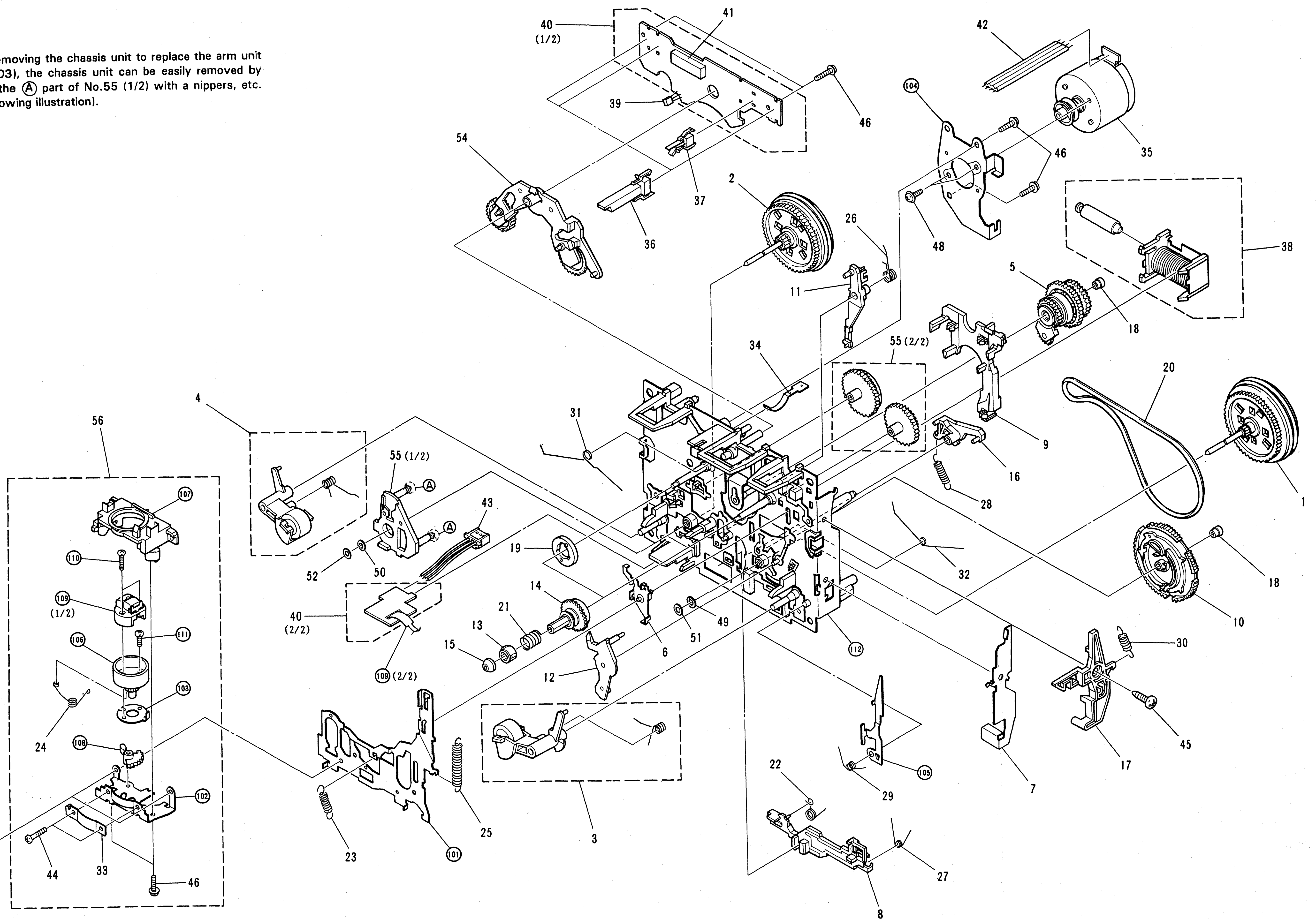
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11
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18
34
55 (2/2)
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4
56
31
9
16
28
1
107
55 (1/2)
Ⓐ
Ⓐ
43
19
32
18
110
52
50
109 (1/2)
14
21
40 (2/2)
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111
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49
112
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106
12
109 (2/2)
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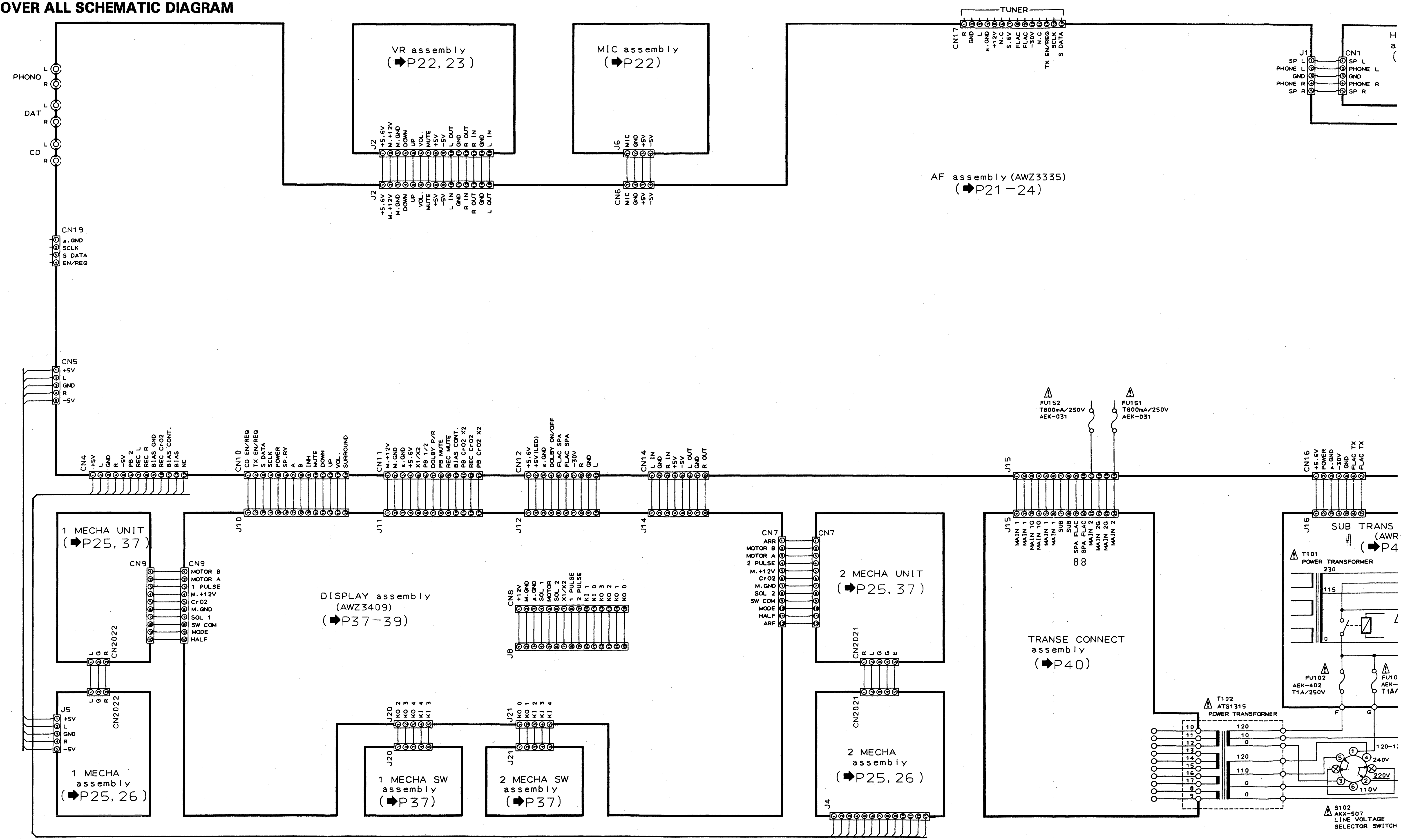
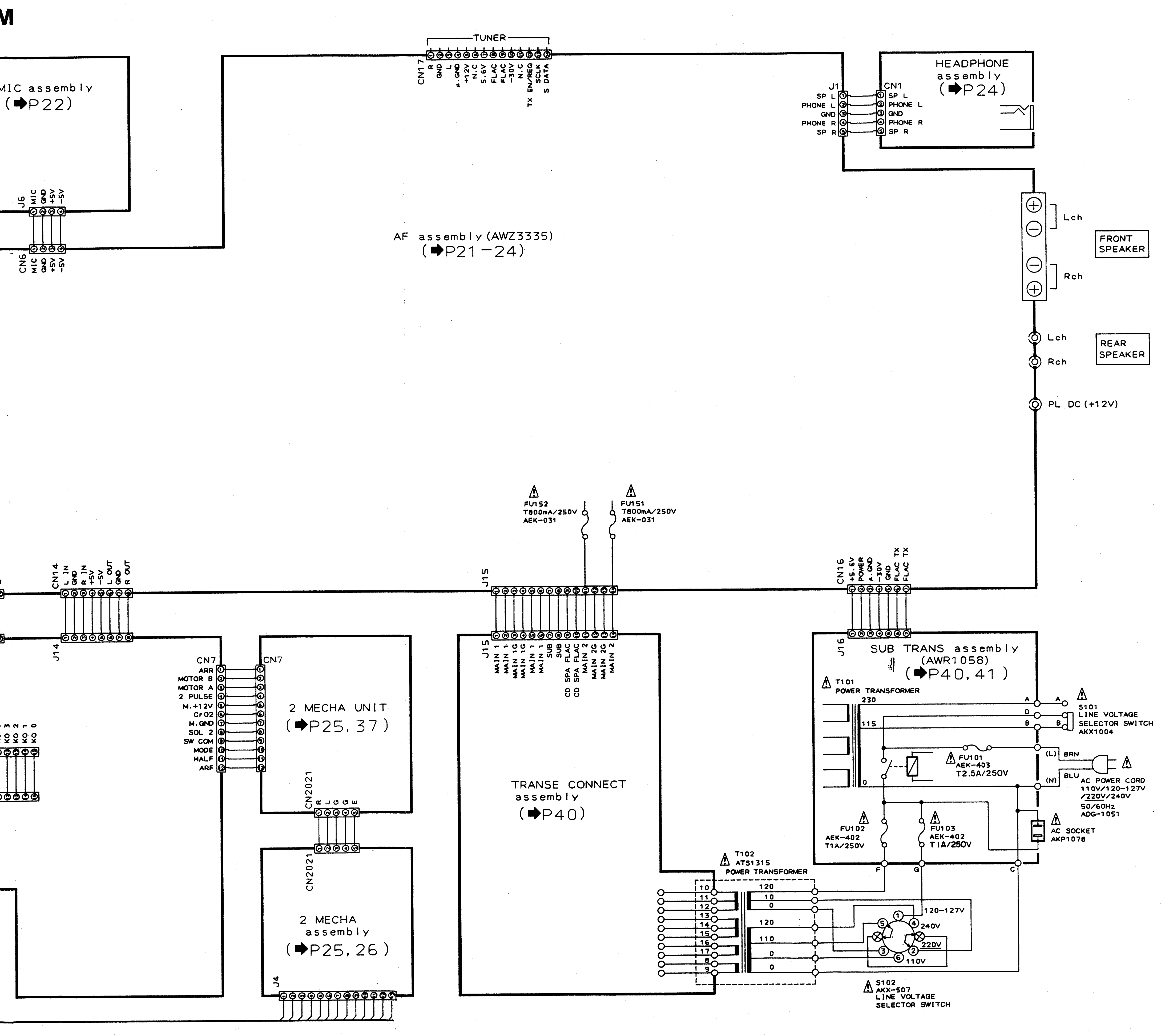
## . SCHEMATIC DIAGRAM AND P.C.BOARDS CONNECTION DIAGRAM

### 1 OVER ALL SCHEMATIC DIAGRAM



1 2 3 4 5 6 7
PHONO L R
DAT L R
CD L R
VR assembly (➡P22, 23)
J2 +5.6V M.+12V M.GND DOWN UP VOL. MUTE +5V −5V L OUT GND R OUT R IN GND L IN
MIC assembly (➡P22)
J6 MIC GND +5V −5V
CN6 MIC GND +5V −5V
TUNER
CN17 R GND L ⌀.GND +12V N.C 5.6V FLAC FLAC −30V N.C TX EN/REQ SCLK S DATA
J1 SP L PHONE L GND PHONE R SP R
CN1 SP L PHONE L GND PHONE R SP R
AF assembly (AWZ3335) (➡P21−24)
CN19 ⌀.GND SCLK S DATA EN/REQ
CN5 +5V L GND R −5V
FU152 T800mA/250V AEK-031
FU151 T800mA/250V AEK-031
CN4 +5V L GND R −5V PB 2 REC L REC R BIAS GND REC CrO2 BIAS CONT. BIAS NC
CN10 CD EN/REQ TX EN/REQ S DATA SCLK POWER SP.RY A B INH MUTE DOWN UP VOL. SURROUND
CN11 M.+12V M.GND ⌀.GND +5.6V X1/X2 PB 1/2 DOLBY P/R PB MUTE REC MUTE BIAS CONT. PB CrO2 X2 REC CrO2 PB CrO2 X2
CN12 +5.6V +5V(LED) ⌀.GND DOLBY ON/OFF FLAC SPA FLAC SPA −30V R GND L
CN14 L IN GND R IN +5V −5V L OUT GND R OUT
J15
CN16 +5.6V POWER ⌀.GND −30V GND FLAC TX FLAC TX
J10 J11 J12 J14
J15 MAIN 1 MAIN 1 MAIN 1G MAIN 1G MAIN 1 MAIN 1 SUB SUB SPA FLAC SPA FLAC MAIN 2 MAIN 2 MAIN 2G MAIN 2G MAIN 2
J16
SUB TRANS (AWR (➡P4
T101 POWER TRANSFORMER 230 115 0
1 MECHA UNIT (➡P25, 37)
CN9 MOTOR B MOTOR A 1 PULSE M.+12V CrO2 M.GND SOL 1 SW COM MODE HALF
DISPLAY assembly (AWZ3409) (➡P37−39)
CN8 +12V M.GND ⌀.GND SOL 1 MOTOR SOL 2 X1/X2 1 PULSE 2 PULSE KI 1 KI 0 KO 3 KO 2 KO 1 KO 0
J8
CN7 ARR MOTOR B MOTOR A 2 PULSE M.+12V CrO2 M.GND SOL 2 SW COM MODE HALF ARF
2 MECHA UNIT (➡P25, 37)
CN2022 L G R
CN2021 R L G G E
J5 +5V L GND R −5V
1 MECHA assembly (➡P25, 26)
J20 KO 2 KO 3 KO 4 KI 1 KI 3
J21 KO 0 KO 1 KI 2 KI 3 KI 4
1 MECHA SW assembly (➡P37)
2 MECHA SW assembly (➡P37)
2 MECHA assembly (➡P25, 26)
J4
TRANSE CONNECT assembly (➡P40)
FU102 AEK-402 T1A/250V
FU10 AEK- T1A/
F G
T102 ATS1315 POWER TRANSFORMER
10 11 12 13 14 15 16 17 8 9
120 10 0 120 110 0 0
120−1 240V 220V 110V
S102 AKX-507 LINE VOLTAGE SELECTOR SWITCH


M
MIC assembly
(➡P22)
J6
MIC GND +5V -5V
CN6
MIC GND +5V -5V
TUNER
CN17
R GND L A.GND +12V N.C 5.6V FLAC FLAC -30V N.C TX EN/REQ SCLK S DATA
AF assembly (AWZ3335)
(➡P21−24)
J1
SP L
PHONE L
GND
PHONE R
SP R
CN1
HEADPHONE assembly
(➡P24)
Lch
Rch
FRONT SPEAKER
REAR SPEAKER
PL DC (+12V)
FU152
T800mA/250V
AEK-031
FU151
T800mA/250V
AEK-031
CN14
L IN GND R IN +5V -5V L OUT GND R OUT
J14
J15
MAIN 1 MAIN 1G MAIN 1G MAIN 1 MAIN 1 SUB SUB SPA FLAC SPA FLAC MAIN 2 MAIN 2G MAIN 2G MAIN 2
CN16
+5.6V POWER A.GND -30V GND FLAC TX FLAC TX
J16
CN7
ARR
MOTOR B
MOTOR A
2 PULSE
M.+12V
CrO2
M.GND
SOL 2
SW COM
MODE
HALF
ARF
2 MECHA UNIT
(➡P25, 37)
CN2021
2 MECHA assembly
(➡P25, 26)
J4
TRANSE CONNECT assembly
(➡P40)
SUB TRANS assembly
(AWR1058)
(➡P40, 41)
T101
POWER TRANSFORMER
230
115
0
S101
LINE VOLTAGE SELECTOR SWITCH
AKX1004
FU101
AEK-403
T2.5A/250V
BRN
BLU
AC POWER CORD
110V/120-127V
/220V/240V
50/60Hz
ADG-1051
AC SOCKET
AKP1078
FU102
AEK-402
T1A/250V
FU103
AEK-402
T1A/250V
T102
ATS1315
POWER TRANSFORMER
120
10
0
120
110
0
0
120-127V
240V
220V
110V
S102
AKX-507
LINE VOLTAGE SELECTOR SWITCH
4
5
6
7
8
9
A
B
C
D

1. **RESISTORS:**
Indicated in Ω, ¼W, ⅛W, ±5% tolerance unless otherwise noted k : kΩ, M : MΩ, (F) : ±1%, (G) : ±2%, (K) : ±10% (M); ±20% tolerance

2. **CAPACITORS:**
Indicated in capacity (μF)/voltage (V) unless otherwise noted p : pF
Indication without voltage is 50V except electrolytic capacitor.

3. **VOLTAGE, CURRENT:**
▭ : Signal voltage at ( 33 W + 33 W 8Ω)output (1kHz)
▭ : DC voltage (V) at no input signal
Value in ( ) is DC voltage at rated power.
⇦ mA : DC current at no input signal

4. **OTHERS:**
➡ : Signal route.
⊘ : Adjusting point.
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
※ marked capacitors and resistors have parts numbers.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

**SWITCHES:**

LINE VOLTAGE SELECTOR SWITCH

| | |
|---|---|
| S101 | (SD TYPE ONLY) |
| S102 | (SD TYPE ONLY) |

DISPLAY assembly

| | |
|---|---|
| S1504 | POWER |
| S1505 | VIDEO |
| S1507 | FADE/FINE |
| S1510 | AI MEMO |
| S1511 | AI BGM |
| S1512 | PHONO |
| S1513 | 2 REC MUTE |
| S1514 | DISCO |
| S1516 | SURR |
| S1517 | TAPE |
| S1518 | 2 REC |
| S1519 | X2 COPY |
| S1522 | CD |
| S1523 | TX |
| S1524 | 2 PAUSE |
| S1525 | X1 COPY |
| S1528 | DOLBY NR ON/OFF |

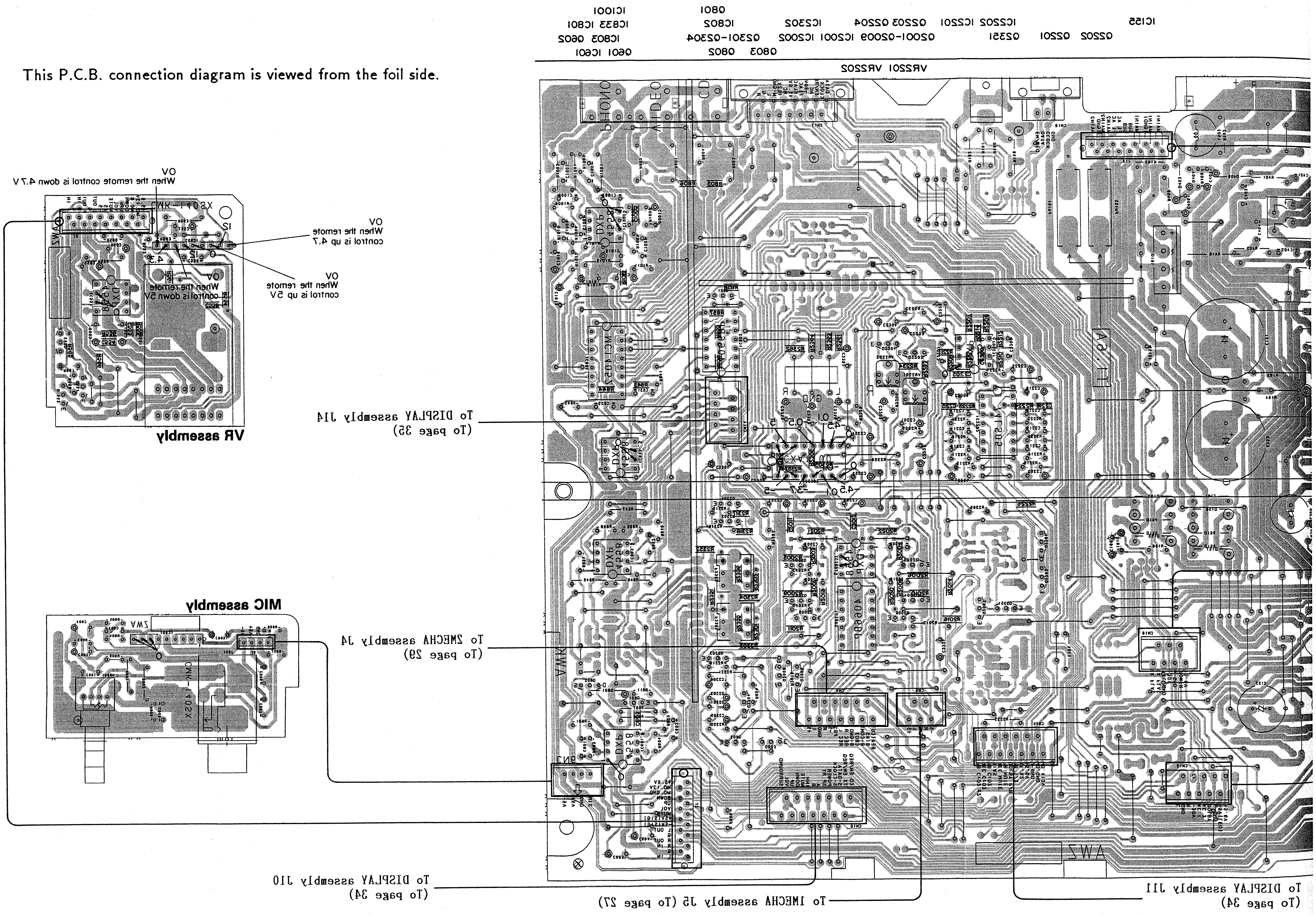
1 MECH SW assembly

| | |
|---|---|
| S1551 | 1 REV |
| S1552 | 1 PLAY |
| S1554 | 1 REW |
| S1555 | 1 FF |

2 MECH SW assembly

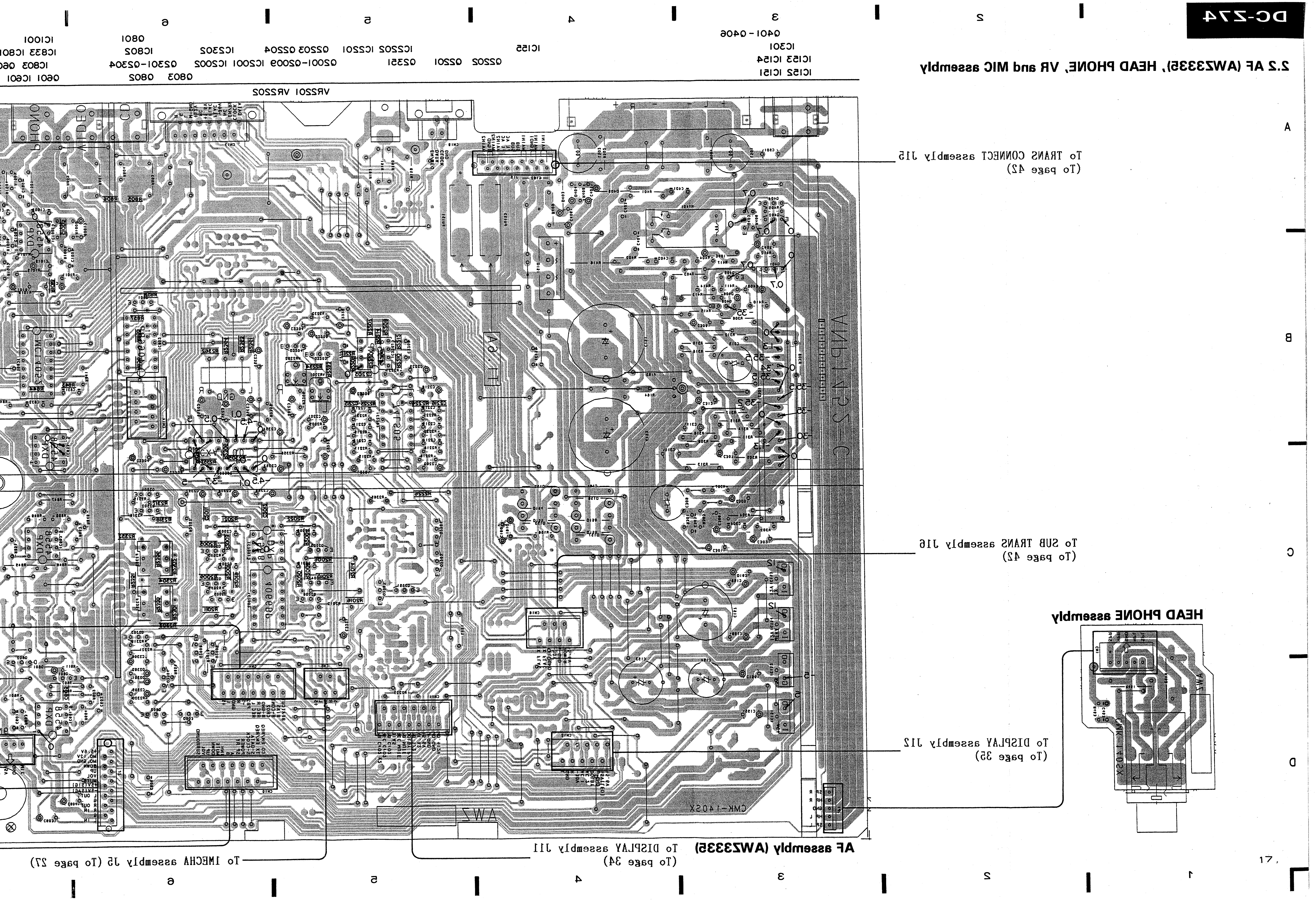
| | |
|---|---|
| S1556 | 2 STOP |
| S1557 | 2 REV |
| S1558 | 2 PLAY |
| S1559 | 2 REW |
| S1560 | 2 FF |

This P.C.B. connection diagram is viewed from the foil side.



9
8
7
6
5
4
A
B
C
D
IC1001
IC833 IC801
IC803 Q602
Q601 IC601
Q801
IC802
Q803 Q802
Q2301-Q2304
IC2302
Q2203 Q2204
Q2001-Q2009 IC2001 IC2002
IC2202 IC2201
Q2351
Q2202 Q2201
IC155
VR2201 VR2202
0V
When the remote control is down 4.7V
0V
When the remote control is up 4.7V
0V
When the remote control is up 5V
0V
When the remote control is down 5V
VR assembly
MIC assembly
To DISPLAY assembly J14
(To page 35)
To 2MECHA assembly J4
(To page 29)
To DISPLAY assembly J10
(To page 34)
To 1MECHA assembly J5 (To page 27)
To DISPLAY assembly J11
(To page 34)

## 2.2 AF (AWZ3335), HEAD PHONE, VR and MIC assembly


6
5
4
3
2
IC1001
IC833 IC801
IC803 Q60
Q601 IC601
Q801
IC802
Q2301-Q2304
Q803 Q802
IC2302
IC2001 IC2002
Q2201-Q2009
Q2203 Q2204
IC2202 IC2201
Q2351
Q2202 Q2201
IC155
Q401-Q406
IC301
IC153 IC154
IC152 IC151
VR2201 VR2202
A
B
C
D
HEAD PHONE assembly
1

To TRANS CONNECT assembly J15
(To page 42)

To SUB TRANS assembly J16
(To page 42)

To DISPLAY assembly J12
(To page 35)

**AF assembly (AWZ3335)**

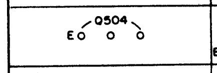
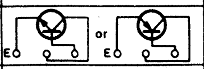
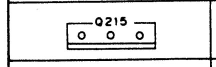
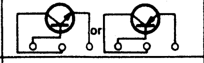
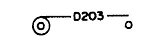
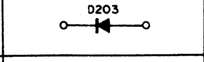
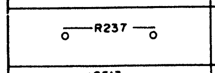
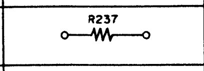
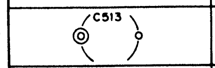
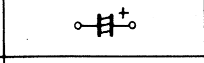
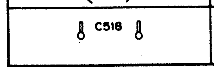
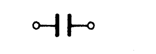
To DISPLAY assembly J11
(To page 34)

To IMECHA assembly J5 (To page 27)

## 2.2 AF (AWZ3335), HEAD PHONE, VR and MIC assembly

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

| P.C.B. pattern diagram indication | Corresponding part symbol | Part Name |
|---|---|---|
|  |  | Transistor |
|  |  | Radiator type transistor |
|  |  | Diode |
|  |  | Resistor |
|  |  | Capacitor (Polarity) |
|  |  | Capacitor (Non-polarity) |

Others

| P.C.B. pattern diagram indication | Part Name |
|---|---|
| IC | IC |
| S | Switch |
| RY | Relay |
| L | Coil |
| F | Filter |
| VR | Variable resistor or Semi-fixed resistor |

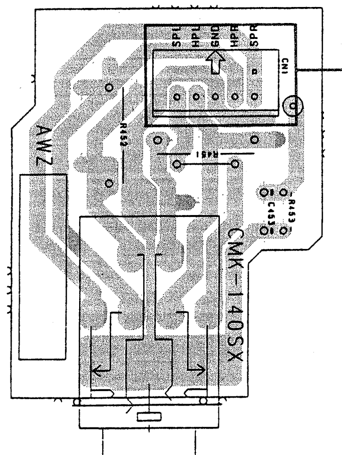
3. The capactor terminal marked with ◎ (double circles) shows negatine termianl.
4. The diode terminal marked with ◎ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

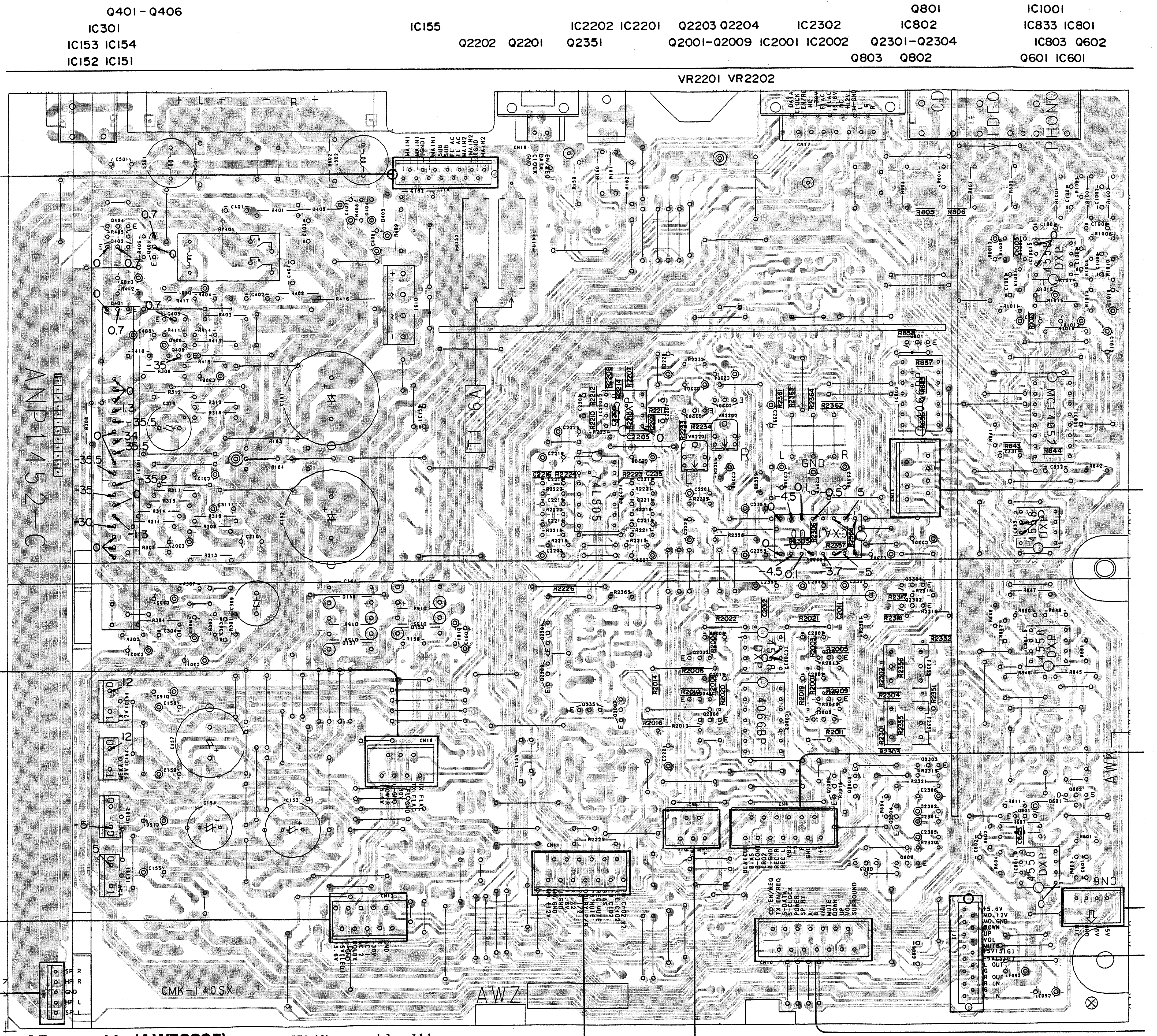
To TRANS CONNECT assembly J15
(To page 42)

To SUB TRANS assembly J16
(To page 42)

To DISPLAY assembly J12
(To page 35)

**HEAD PHONE assembly**


SPL
HPL
GND
HPR
SPR
CN1
AWZ
15PH
CMK-140SX


1
2
3
4
5
6
7
A
B
C
D
Q401-Q406
IC301
IC153 IC154
IC152 IC151
IC155
Q2202 Q2201
IC2202 IC2201
Q2351
Q2203 Q2204
Q2001-Q2009 IC2001
IC2302
IC2002
Q801
IC802
Q2301-Q2304
Q803 Q802
IC1001
IC833 IC801
IC803 Q602
Q601 IC601
VR2201 VR2202
ANP1452-C
T1.6A
74LS05
4558DXP
4066BP
MC14052B
GND
L
R
CD
VIDEO
PHONO
AWK
CN6
CMK-140SX
AWZ
SP R
HP R
GND
HP L
SP L

**AF assembly (AWZ3335)**

To DISPLAY assembly J11
(To page 34)

To 1MECHA assembly J5 (To page 27)

IC155

Q2202 Q2201

IC2202 IC2201
Q2351

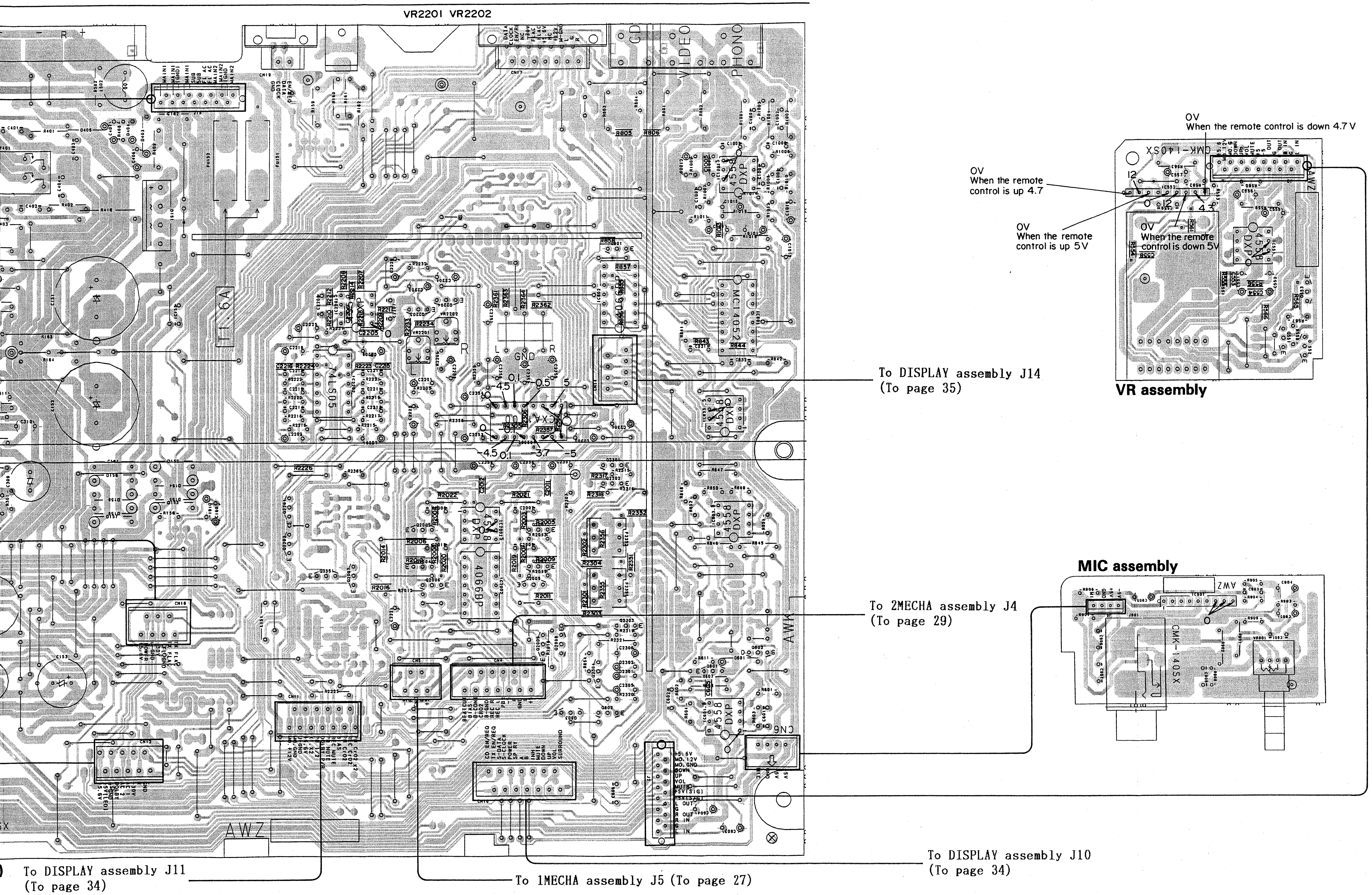
Q2203 Q2204
Q2001–Q2009 IC2001 IC2002

IC2302

Q801
IC802
Q2301–Q2304
Q803 Q802

IC1001
IC833 IC801
IC803 Q602
Q601 IC601

VR2201 VR2202



OV
When the remote control is down 4.7 V
OV
When the remote control is up 4.7
OV
When the remote control is up 5 V
OV
When the remote control is down 5V
VR assembly
MIC assembly
CD
VIDEO
PHONO
T1.6A
74LS05
4066BP
MC14052
4558 DXP
GND
L
R
AWK
AWZ
CMK-140SX
CN6

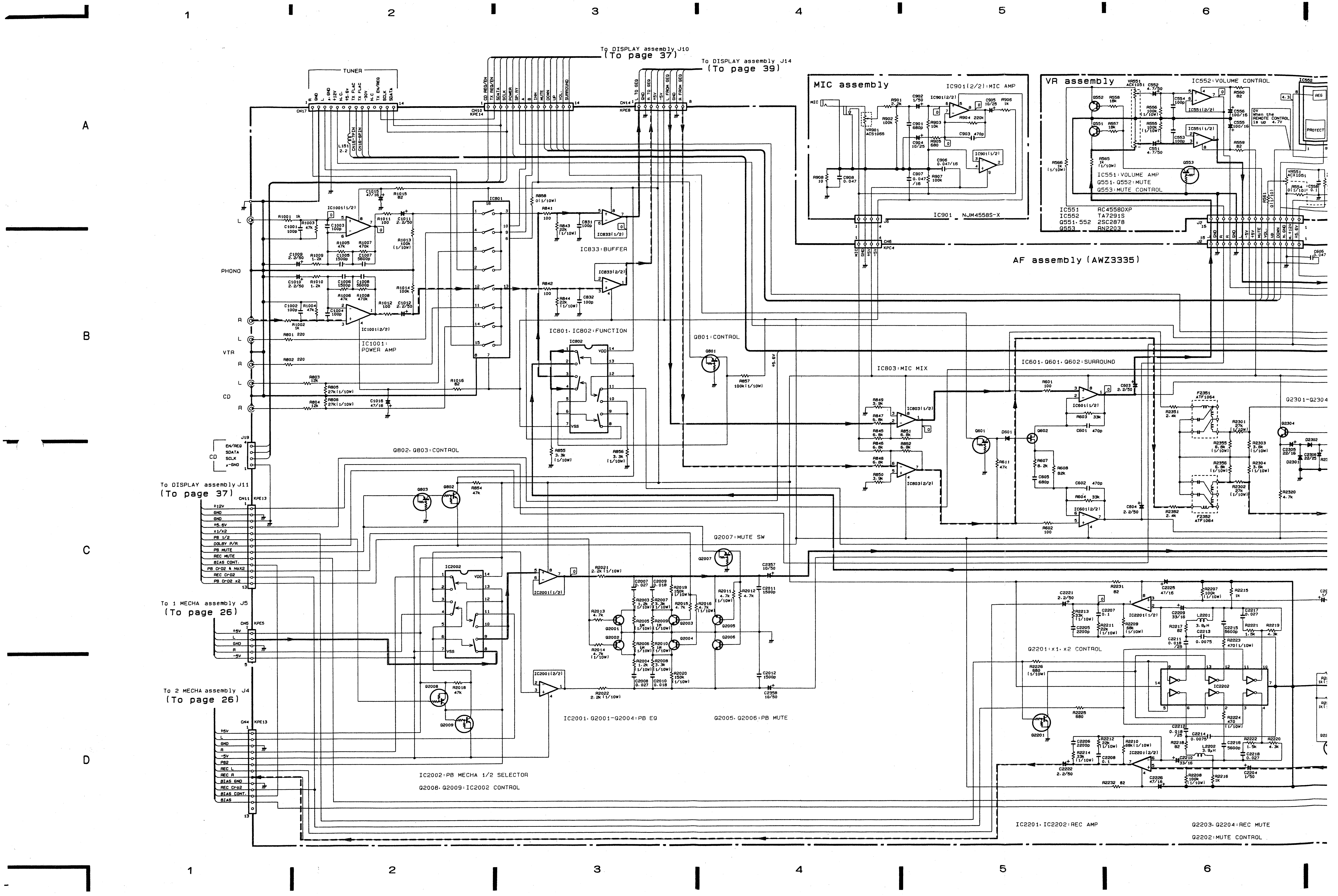
To DISPLAY assembly J14
(To page 35)

To 2MECHA assembly J4
(To page 29)

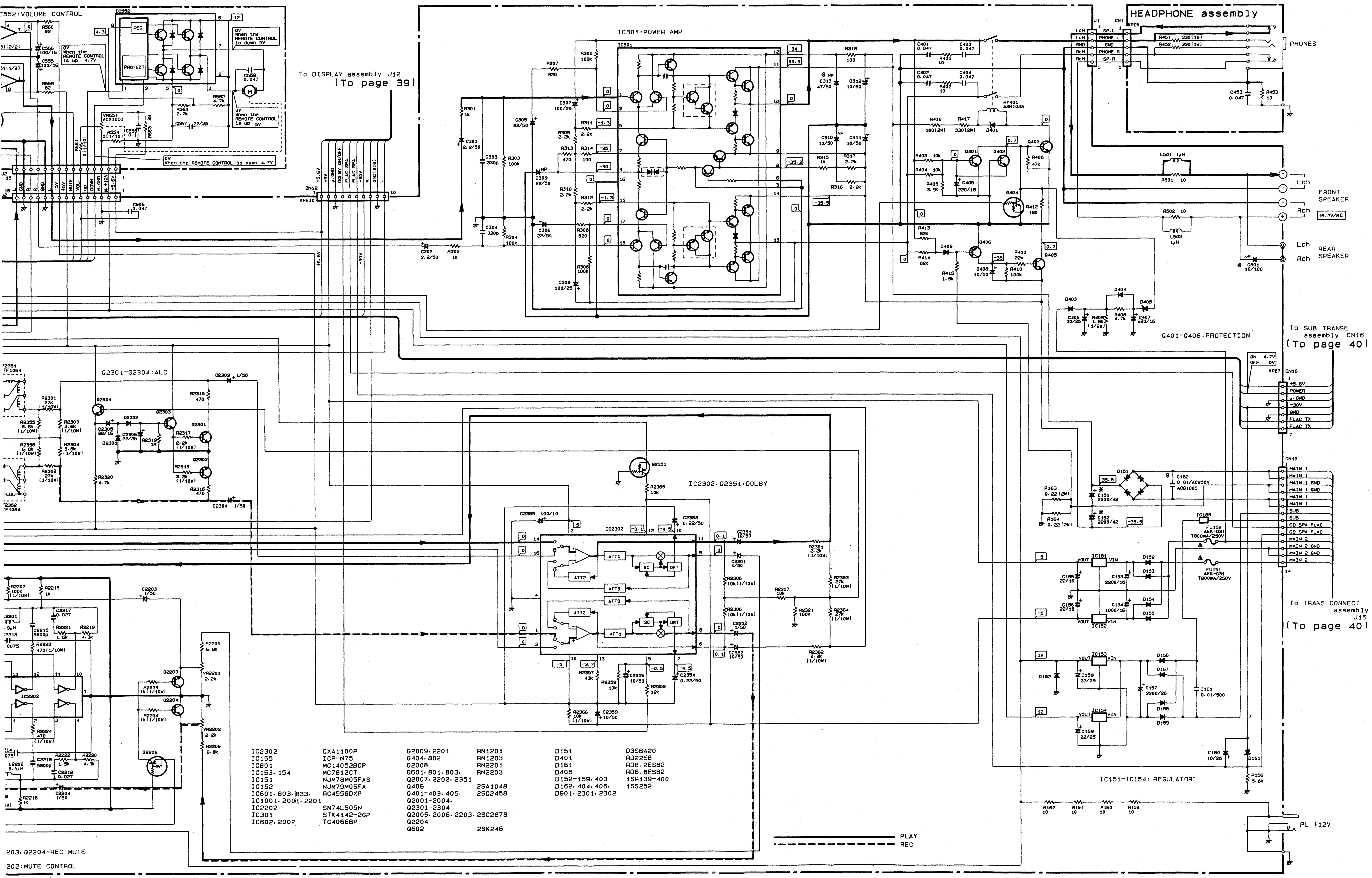
To DISPLAY assembly J11
(To page 34)

To 1MECHA assembly J5 (To page 27)

To DISPLAY assembly J10
(To page 34)

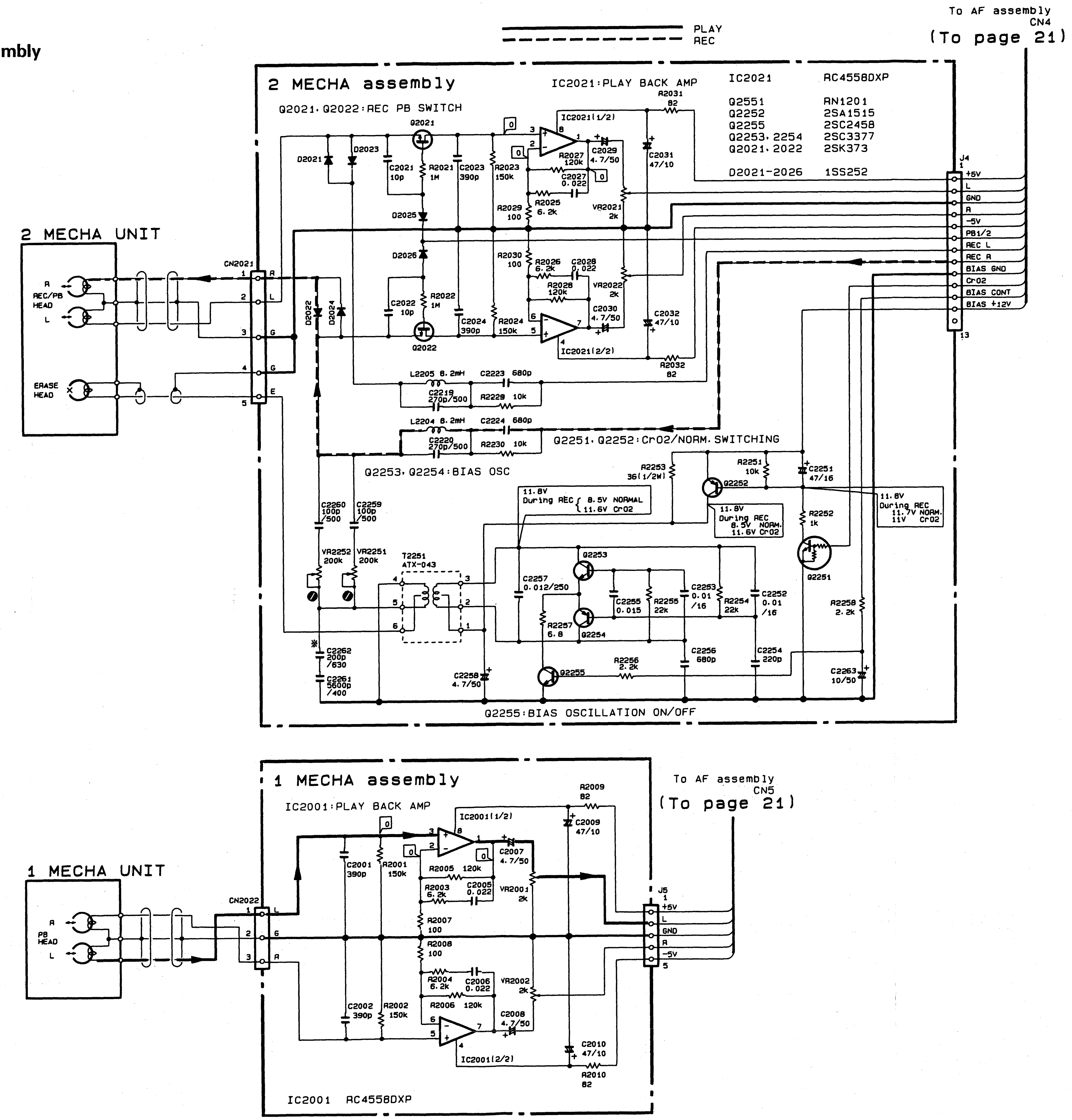


To DISPLAY assembly J10
(To page 37)
To DISPLAY assembly J14
(To page 39)
TUNER
CN17
CN10 KPE14
CN14 KPE8
MIC assembly
IC901(2/2):MIC AMP
IC901 NJM4558S-X
VR assembly
IC552:VOLUME CONTROL
IC551:VOLUME AMP
Q551, Q552:MUTE
Q553:MUTE CONTROL
IC551 RC4558DXP
IC552 TA7291S
Q551, 552 2SC2878
Q553 RN2203
0V When the REMOTE CONTROL is up 4.7V
PROTECT
AF assembly (AWZ3335)
PHONO
VTR
CD
L
R
IC1001(1/2)
IC1001(2/2)
IC1001: POWER AMP
IC801
IC833:BUFFER
IC833(1/2)
IC833(2/2)
IC801, IC802:FUNCTION
IC802
Q801:CONTROL
IC803:MIC MIX
IC803(1/2)
IC803(2/2)
IC601, Q601, Q602:SURROUND
IC601(1/2)
IC601(2/2)
Q2301-Q2304
J19
EN/REQ
SDATA
SCLK
μ-GND
Q802, Q803:CONTROL
To DISPLAY assembly J11
(To page 37)
CN11 KPE13
+12V
GND
+5.6V
x1/x2
PB 1/2
DOLBY P/R
PB MUTE
REC MUTE
BIAS CONT.
PB CrO2 & NoX2
REC CrO2
PB CrO2 x2
Q2007:MUTE SW
IC2002
IC2001(1/2)
IC2001(2/2)
To 1 MECHA assembly J5
(To page 26)
CN5 KPE5
To 2 MECHA assembly J4
(To page 26)
CN4 KPE13
+5V
-5V
PB2
REC L
REC R
BIAS GND
REC CrO2
BIAS CONT.
BIAS
IC2001, Q2001-Q2004:PB EQ
Q2005, Q2006:PB MUTE
IC2002:PB MECHA 1/2 SELECTOR
Q2008, Q2009:IC2002 CONTROL
Q2201:x1, x2 CONTROL
IC2201(1/2)
IC2201(2/2)
IC2202
IC2201, IC2202:REC AMP
Q2203, Q2204:REC MUTE
Q2202:MUTE CONTROL
1
2
3
4
5
6
A
B
C
D


IC552:VOLUME CONTROL
IC552
REG
PROTECT
0V When the REMOTE CONTROL is down 5V
0V When the REMOTE CONTROL is up 4.7V
0V When the REMOTE CONTROL is down 4.7V
VR551 ACX1051
To DISPLAY assembly J12
(To page 39)
CN12
KPE10
+5.6V
GND
DOLBY ON/OFF
FLAC SPA
-30V
R
GND(SIG)
L
IC301:POWER AMP
IC301
HEADPHONE assembly
PHONES
J1
CN1
KPC5
Lch
Rch
GND
PHONE L
PHONE R
SP.L
SP.R
RY401 ASR1035
D401
Q401-Q406:PROTECTION
FRONT SPEAKER
REAR SPEAKER
16.2V/8Ω
To SUB TRANSE assembly CN16
(To page 40)
ON 4.7V
OFF 0V
KPE7
CN16
POWER
GND
FLAC TX
CN15
MAIN 1
MAIN 1 GND
SUB
CD SPA FLAC
MAIN 2
MAIN 2 GND
To TRANS CONNECT assembly J15
(To page 40)
Q2301-Q2304:ALC
IC2302,Q2351:DOLBY
IC2302
ATT1
ATT2
ATT3
SC
DET
IC2202
IC151-IC154: REGULATOR
IC151
IC152
IC153
IC154
IC155
FU151 AEK-031 T800mA/250V
FU152 AEK-031 T800mA/250V
D151
C162 0.01/AC250V ACG1005
PL +12V
PLAY
REC
203,Q2204:REC MUTE
202:MUTE CONTROL

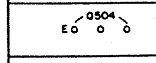
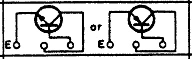
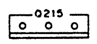
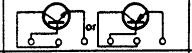
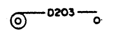
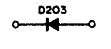
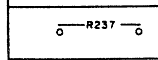
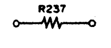
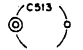
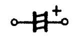
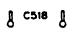
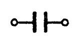
| | | | | | |
|---|---|---|---|---|---|
| IC2302 | CXA1100P | Q2009, 2201 | RN1201 | D151 | D3SBA20 |
| IC155 | ICP-N75 | Q404, 802 | RN1203 | D401 | RD22EB |
| IC801 | MC14052BCP | Q2008 | RN2201 | D161 | RD8. 2ESB2 |
| IC153, 154 | MC7812CT | Q601, 801, 803, | RN2203 | D405 | RD6. 8ESB2 |
| IC151 | NJM78M05FAS | Q2007, 2202, 2351 | | D152-159, 403 | 1SR139-400 |
| IC152 | NJM79M05FA | Q406 | 2SA1048 | D162, 404, 406, | 1SS252 |
| IC601, 803, 833, | RC4558DXP | Q401-403, 405, | 2SC2458 | D601, 2301, 2302 | |
| IC1001, 2001, 2201 | | Q2001-2004, | | | |
| IC2202 | SN74LS05N | Q2301-2304 | | | |
| IC301 | STK4142-2GP | Q2005, 2006, 2203, | 2SC2878 | | |
| IC802, 2002 | TC4066BP | Q2204 | | | |
| | | Q602 | 2SK246 | | |

## 2.3 1 MECHA and 2 MECHA assembly


PLAY
REC
To AF assembly
CN4
(To page 21)
2 MECHA assembly
Q2021, Q2022 : REC PB SWITCH
IC2021 : PLAY BACK AMP
IC2021 RC4558DXP
Q2551 RN1201
Q2252 2SA1515
Q2255 2SC2458
Q2253, 2254 2SC3377
Q2021, 2022 2SK373
D2021-2026 1SS252
2 MECHA UNIT
R
REC/PB HEAD
L
ERASE HEAD
CN2021
R
L
G
G
E
Q2021
Q2022
D2021
D2022
D2023
D2024
D2025
D2026
C2021 10p
R2021 1M
C2023 390p
R2023 150k
C2022 10p
R2022 1M
C2024 390p
R2024 150k
IC2021(1/2)
IC2021(2/2)
R2027 120k
C2029 4.7/50
C2027 0.022
R2025 6.2k
R2029 100
VR2021 2k
R2031 82
C2031 47/10
R2030 100
R2026 6.2k
C2028 0.022
R2028 120k
VR2022 2k
C2030 4.7/50
C2032 47/10
R2032 82
J4
+5V
L
GND
R
-5V
PB1/2
REC L
REC R
BIAS GND
CrO2
BIAS CONT
BIAS +12V
13
L2205 8.2mH
C2223 680p
C2219 270p/500
R2229 10k
L2204 8.2mH
C2224 680p
C2220 270p/500
R2230 10k
Q2251, Q2252 : CrO2/NORM. SWITCHING
Q2253, Q2254 : BIAS OSC
R2253 36(1/2W)
R2251 10k
Q2252
C2251 47/16
11.8V During REC { 8.5V NORMAL 11.6V CrO2
11.8V During REC 8.5V NORM. 11.6V CrO2
11.8V During REC 11.7V NORM. 11V CrO2
R2252 1k
Q2251
C2260 100p/500
C2259 100p/500
VR2252 200k
VR2251 200k
T2251 ATX-043
Q2253
Q2254
Q2255
C2257 0.012/250
C2255 0.015
R2255 22k
C2253 0.01/16
R2254 22k
C2252 0.01/16
R2257 6.8
R2258 2.2k
C2256 680p
C2254 220p
R2256 2.2k
C2263 10/50
C2258 4.7/50
※ C2262 200p/630
C2261 5600p/400
Q2255 : BIAS OSCILLATION ON/OFF
1 MECHA assembly
IC2001 : PLAY BACK AMP
1 MECHA UNIT
R
PB HEAD
L
CN2022
L
G
R
C2001 390p
R2001 150k
C2002 390p
R2002 150k
IC2001(1/2)
IC2001(2/2)
R2005 120k
C2007 4.7/50
R2003 6.2k
C2005 0.022
VR2001 2k
R2007 100
R2008 100
R2004 6.2k
C2006 0.022
VR2002 2k
R2006 120k
C2008 4.7/50
R2009 82
C2009 47/10
C2010 47/10
R2010 82
IC2001 RC4558DXP
J5
+5V
L
GND
R
-5V
To AF assembly
CN5
(To page 21)
1 2 3 4 5 6
A B C D

NOTE

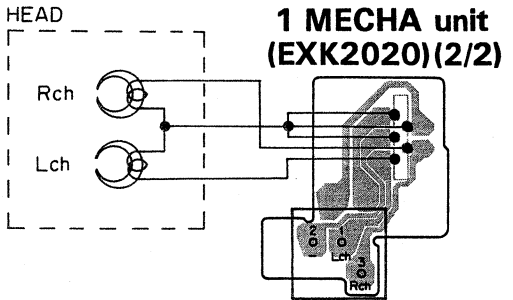
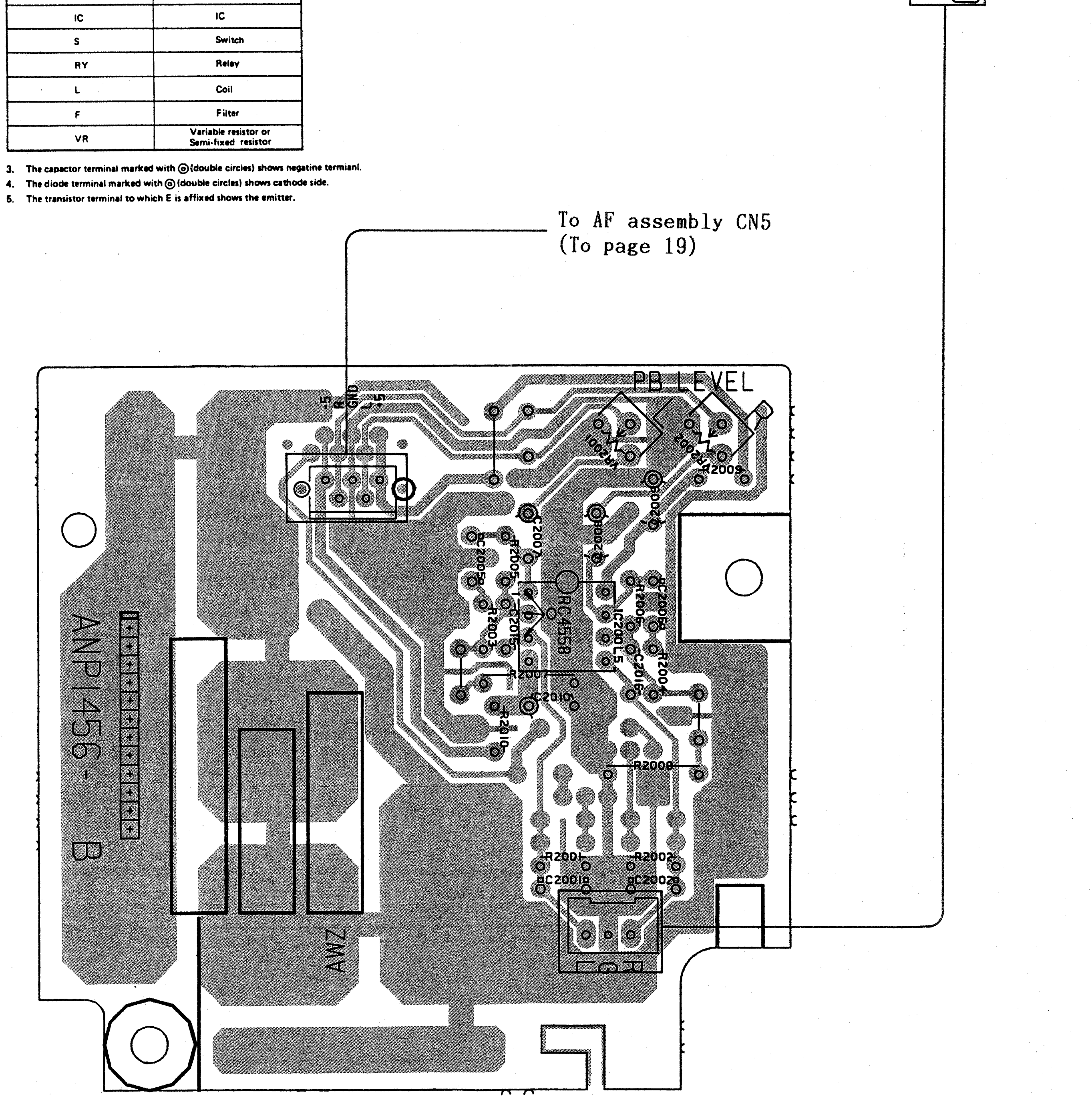
1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

| P.C.B. pattern diagram indication | Corresponding part symbol | Part Name |
|---|---|---|
|  |  | Transistor |
|  |  | Radiator type transistor |
|  |  | Diode |
|  |  | Resistor |
|  |  | Capacitor (Polarity) |
|  |  | Capacitor (Non-polarity) |

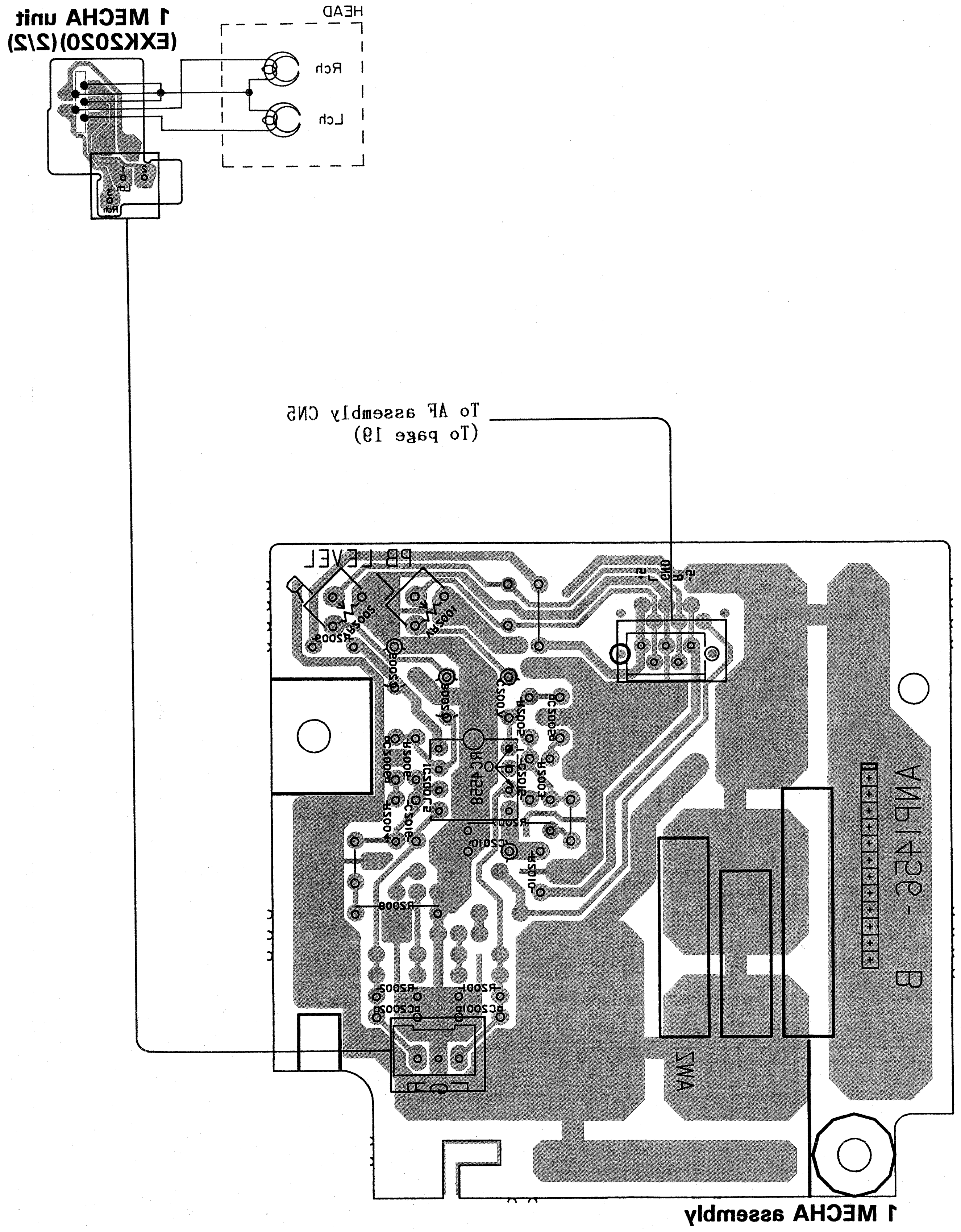
Others

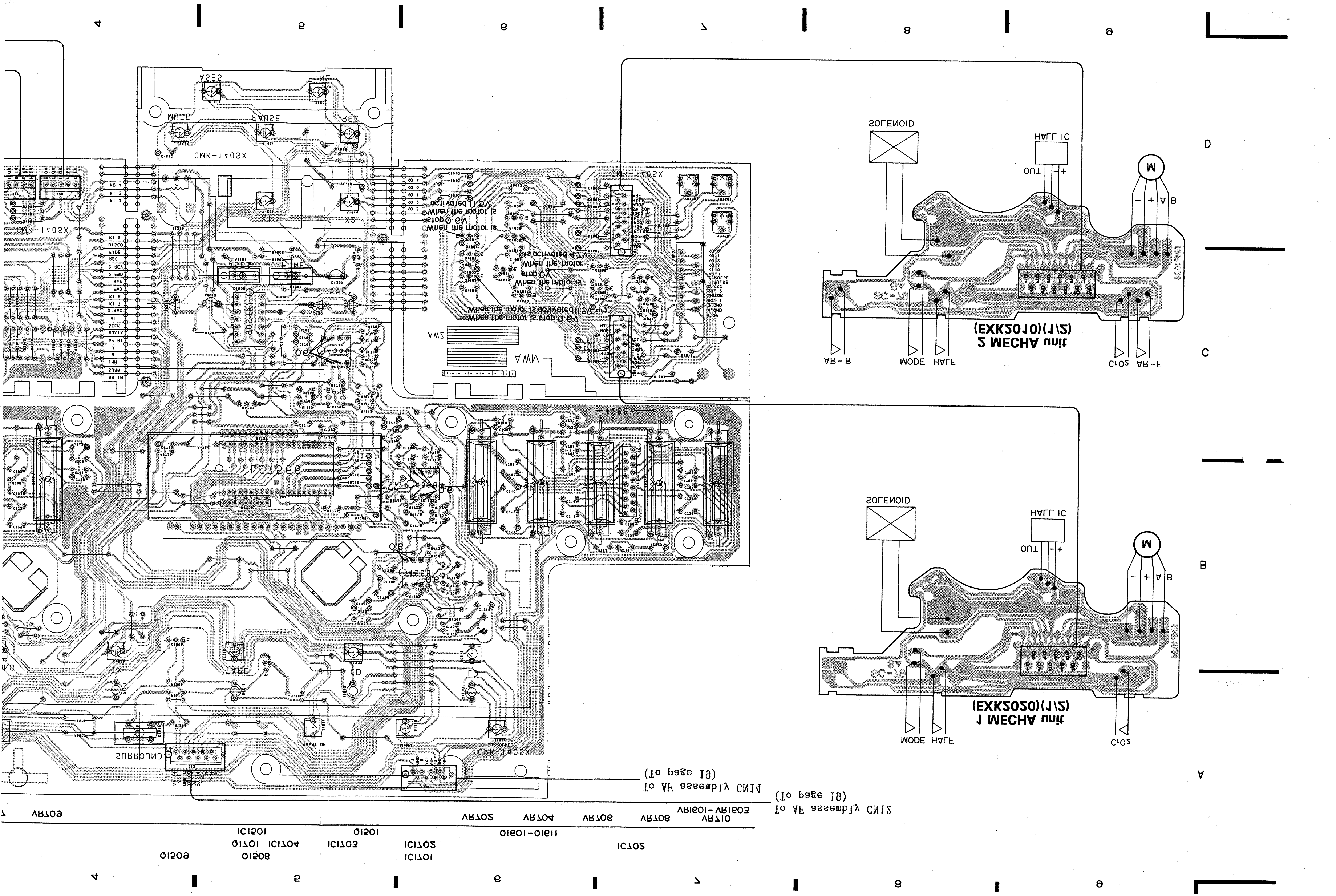
| P.C.B. pattern diagram indication | Part Name |
|---|---|
| IC | IC |
| S | Switch |
| RY | Relay |
| L | Coil |
| F | Filter |
| VR | Variable resistor or Semi-fixed resistor |

3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.



HEAD
Rch
Lch
1 MECHA unit
(EXK2020)(2/2)
Rch
To AF assembly CN5
(To page 19)
PB LEVEL
-5
R
GND
L
VR2001
VR2002
R2009
C2007
C2005
R2005
R2003
RC4558
IC2001
C2006
R2006
R2004
C2016
R2007
C2010
R2010
R2008
R2001
R2002
C2001
C2002
ANP1456-B
AWZ
L
G
R

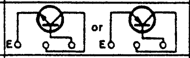
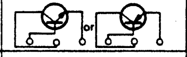
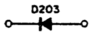
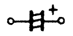
1 MECHA assembly




4
5
6
7
8
9
A
B
C
D
CMK-1405X
MUTE
PAUSE
REC
ASES
FINE
X1
X2
LC7566
4558
0.6
When the motor is stop 0.6V
When the motor is activated 11.5V
When the motor is stop 0V
When the motor is activated 4.7V
AWM
AWZ
1288
SURROUND
TAPE
CD
LD
TX
SMART OP
MEMO
2 MECHA unit
(EXK2010)(1/2)
1 MECHA unit
(EXK2020)(1/2)
SOLENOID
HALL IC
OUT
M
SC-79
AR-R
MODE
HALF
CrO2
AR-F
To AF assembly CN14
(To page 19)
To AF assembly CN12
(To page 19)
VR709
VR702
VR704
VR706
VR708
VR710
VR1601-VR1603
Q1509
Q1508
Q1701 IC1704
IC1501
IC1703
Q1501
IC1701
IC1702
Q1601-Q1611
IC702

NOTE

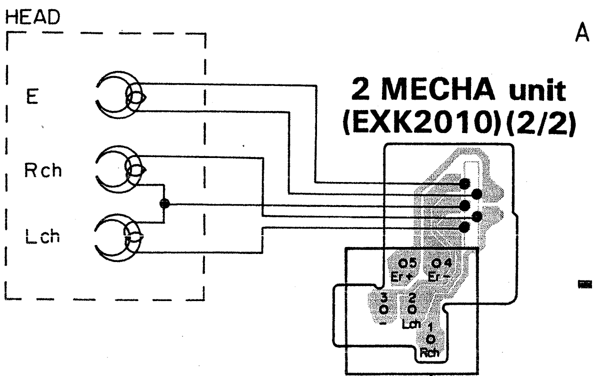
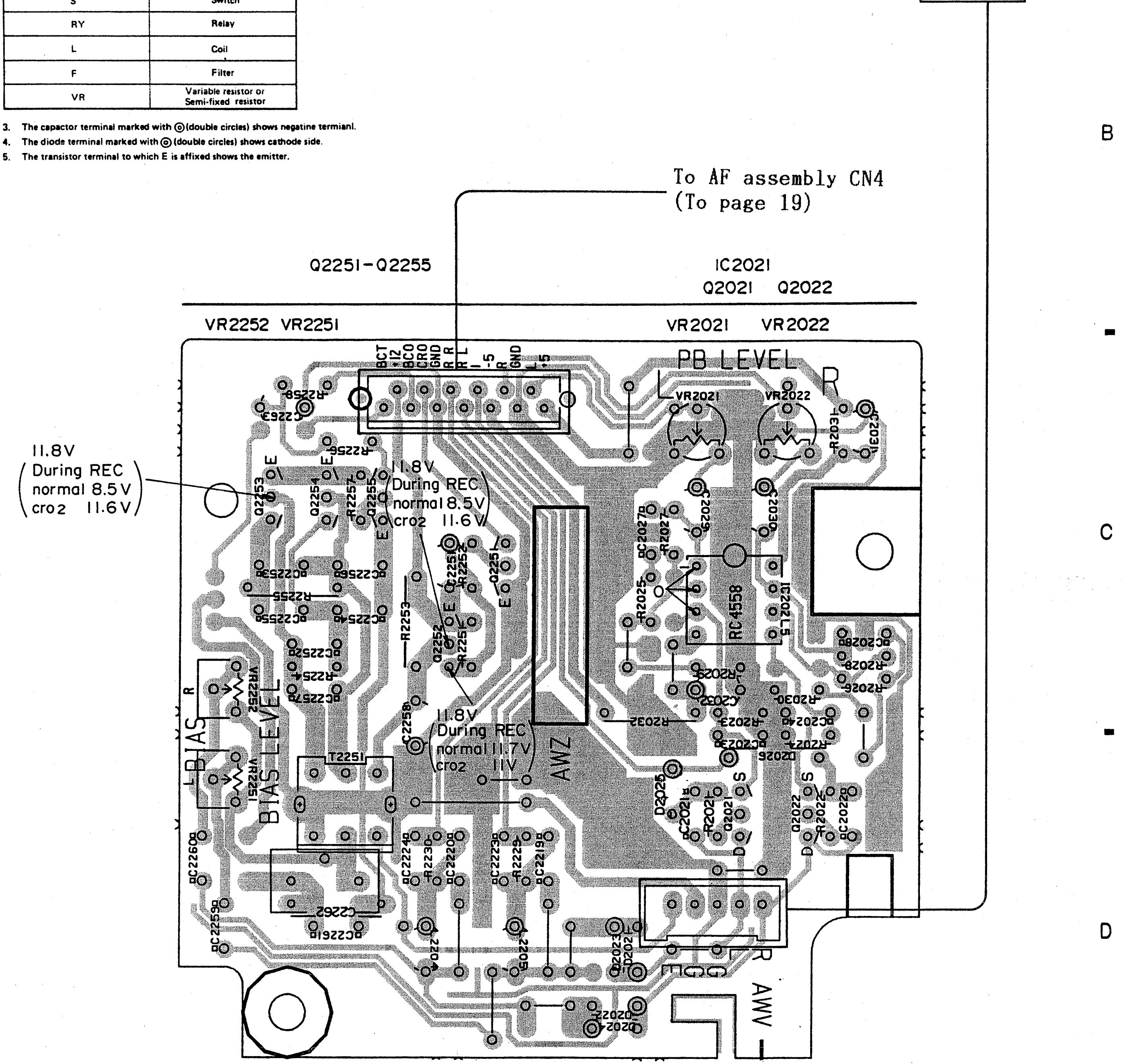
1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

| P.C.B. pattern diagram indication | Corresponding part symbol | Part Name |
|---|---|---|
| E 0504 |  E or E | Transistor |
| 0215 |  or | Radiator type transistor |
| D203 |  D203 | Diode |
| R237 | R237 | Resistor |
| C513 |  | Capacitor (Polarity) |
| C518 | | Capacitor (Non-polarity) |

Others

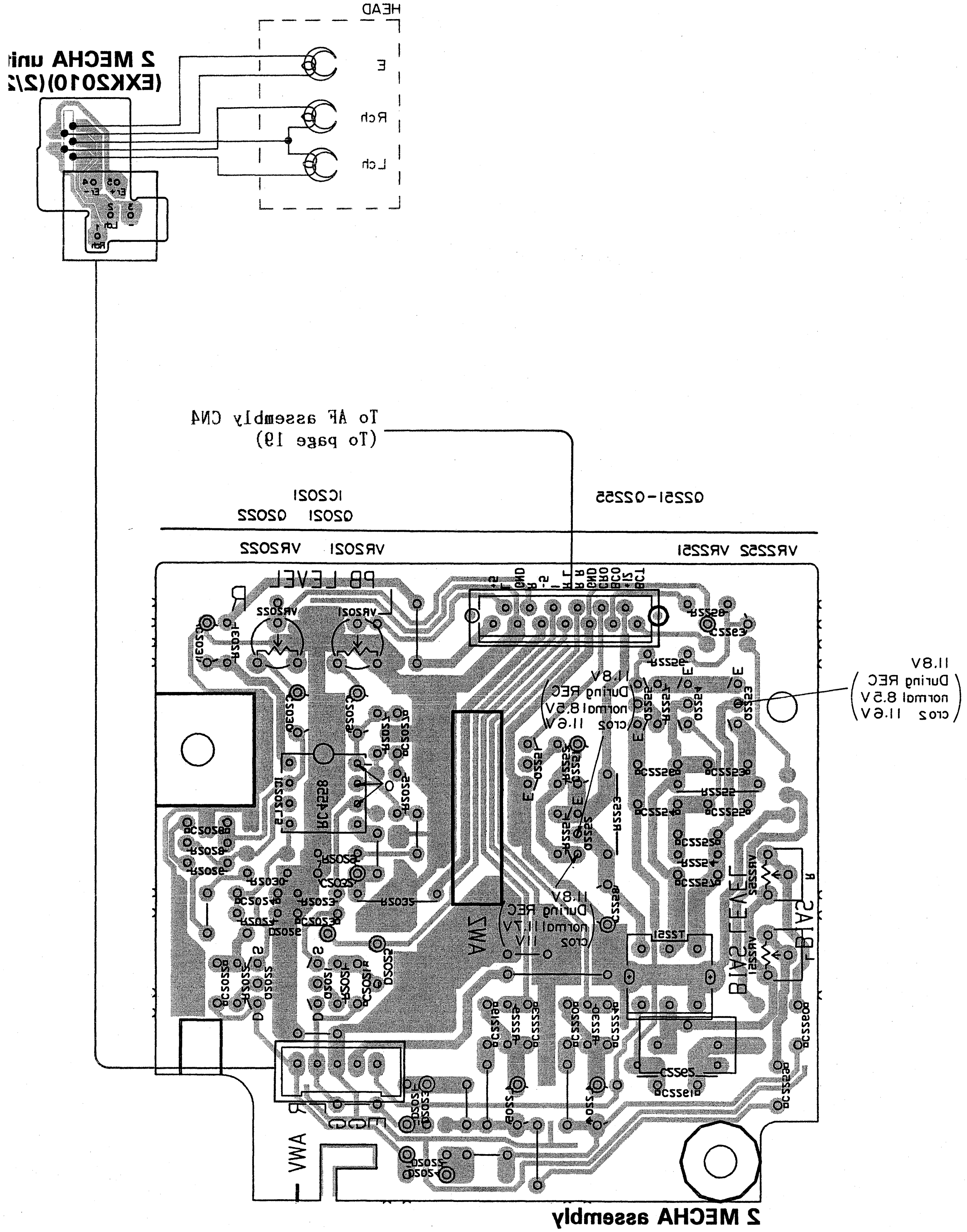
| P.C.B. pattern diagram indication | Part Name |
|---|---|
| IC | IC |
| S | Switch |
| RY | Relay |
| L | Coil |
| F | Filter |
| VR | Variable resistor or Semi-fixed resistor |

3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.



HEAD
E
Rch
Lch
2 MECHA unit (EXK2010)(2/2)
Er+
Er-
Lch
Rch
To AF assembly CN4 (To page 19)
Q2251-Q2255
IC2021
Q2021 Q2022
VR2252 VR2251
VR2021 VR2022
BCT +12 BCO CRO GND R R L -5 R GND L L5
PB LEVEL
L R
11.8V During REC normal 8.5V cro2 11.6V
11.8V During REC normal 8.5V cro2 11.6V
11.8V During REC normal 11.7V cro2 11V
RC4558
AWZ
AWY
BIAS LEVEL
BIAS L R
T2251
C2262
C2261

**2 MECHA assembly**

A


HEAD
E
Rch
Lch
2 MECHA unit
(EXK2010)(2/2
To AF assembly CN4
(To page 19)
IC2021
Q2021 Q2022
Q2251–Q2255
VR2021 VR2022
VR2251 VR2252
PB LEVEL
11.8V
During REC
normal 8.5V
croz 11.6V
normal 11.7V
croz 11V
BIAS LEVEL
AWZ
AWV

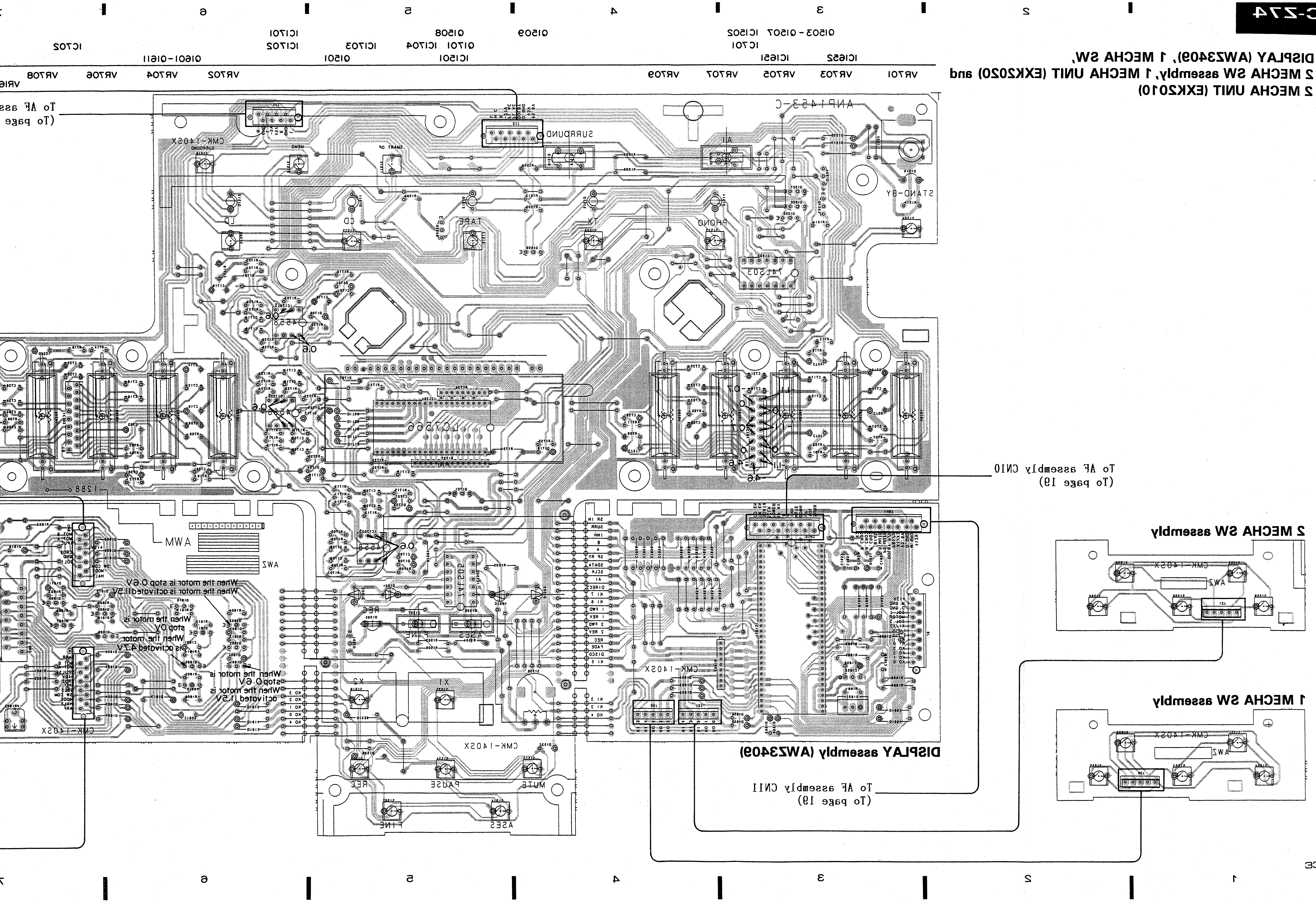
B

C

D

**2 MECHA assembly**

## 2.4 DISPLAY (AWZ3409), 1 MECHA SW, 2 MECHA SW assembly, 1 MECHA UNIT (EXKZ020) and 2 MECHA UNIT (EXKZ010)


DISPLAY assembly (AWZ3409)
2 MECHA SW assembly
1 MECHA SW assembly
To AF assembly CN10
(To page 19)
To AF assembly CN11
(To page 19)
To AF ass
(To page
When the motor is stop 0.6V
When the motor is activated 11.5V
When the motor is stop 0V
When the motor is activated 4.7V
When the motor is stop 0.6V
When the motor is activated 11.5V
IC1503 - Q1507 IC1502
IC1701
IC1651
IC1652
Q1509
Q1508
Q1701 IC1704
IC1501
IC1703
Q1501
IC1701
IC1702
Q1601 - Q1611
IC1702
VR1701
VR1703
VR1705
VR1707
VR1709
VR1702
VR1704
VR1706
VR1708
ANP1453-C
STAND-BY
SURROUND
AI
PHONO
TX
TAPE
CD
LD
MEMO
SMART OP
CMK-140SX
74LS03
4558
LC7566
MWA
AWZ
REC
PAUSE
MUTE
FINE
ASES
X1
X2
1
2
3
4
5
6
7
A
B
C
D

# 4 DISPLAY (AWZ3409), 1 MECHA SW, 2 MECHA SW assembly, 1 MECHA UNIT (EXK2020) and 2 MECHA UNIT (EXK2010)

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

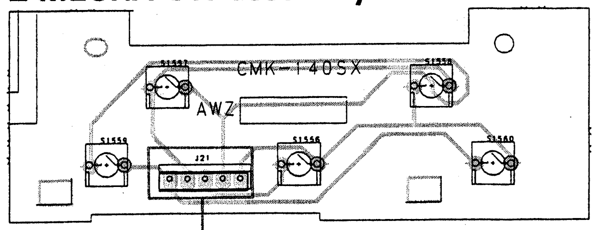
| P.C.B. pattern diagram indication | Corresponding part symbol | Part Name |
|---|---|---|
| E Q504 | E or E | Transistor |
| Q215 | or | Radiator type transistor |
| D203 | D203 | Diode |
| R237 | R237 | Resistor |
| C513 | + | Capacitor (Polarity) |
| C518 | | Capacitor (Non-polarity) |

Others

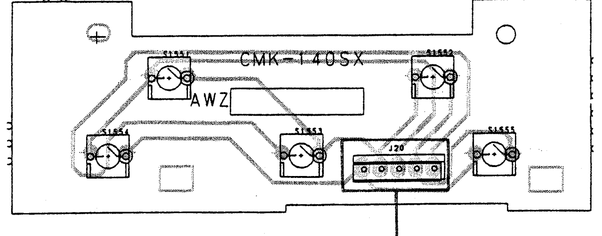
| P.C.B. pattern diagram indication | Part Name |
|---|---|
| IC | IC |
| S | Switch |
| RY | Relay |
| L | Coil |
| F | Filter |
| VR | Variable resistor or Semi-fixed resistor |

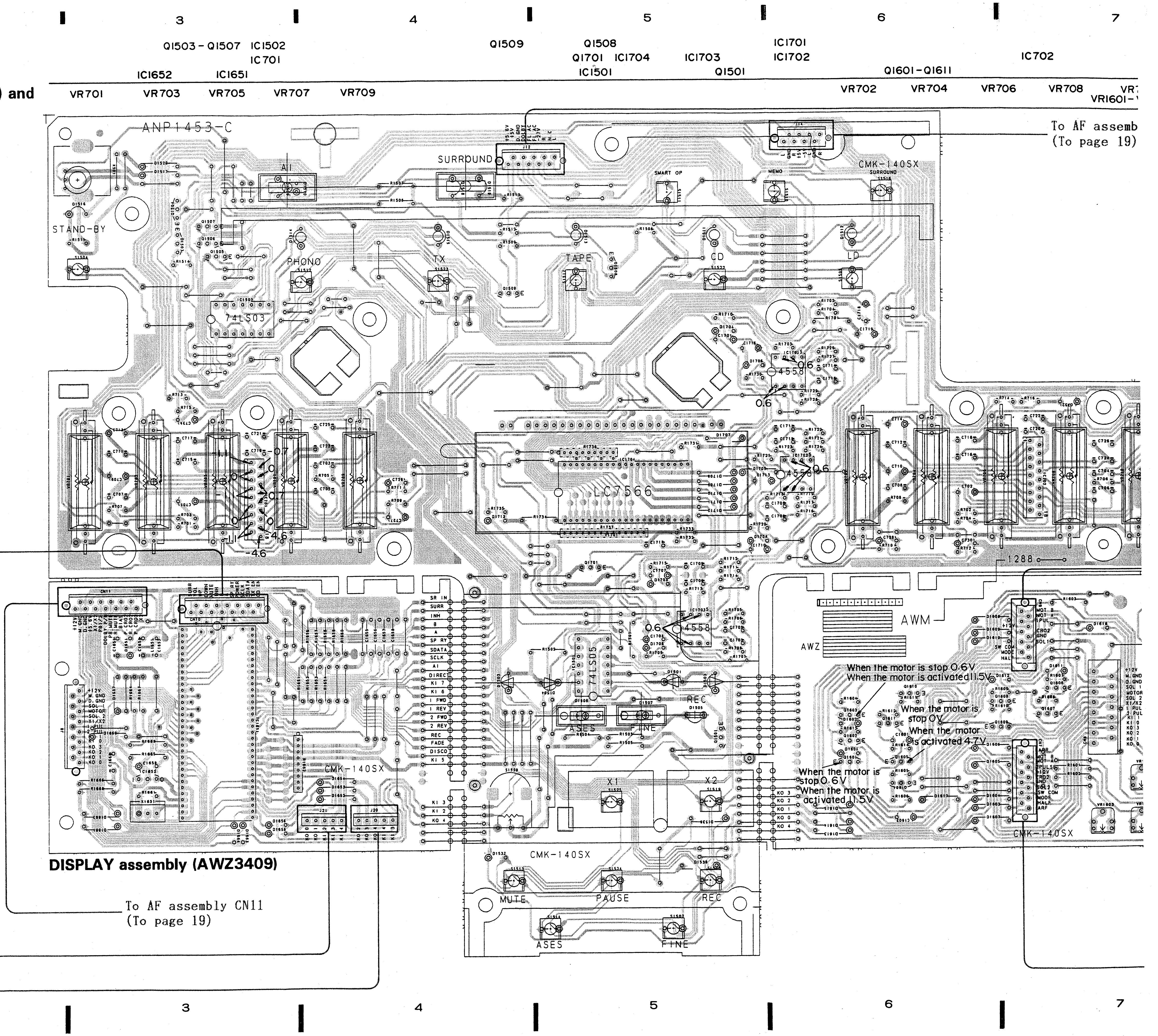
3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

## 2 MECHA SW assembly

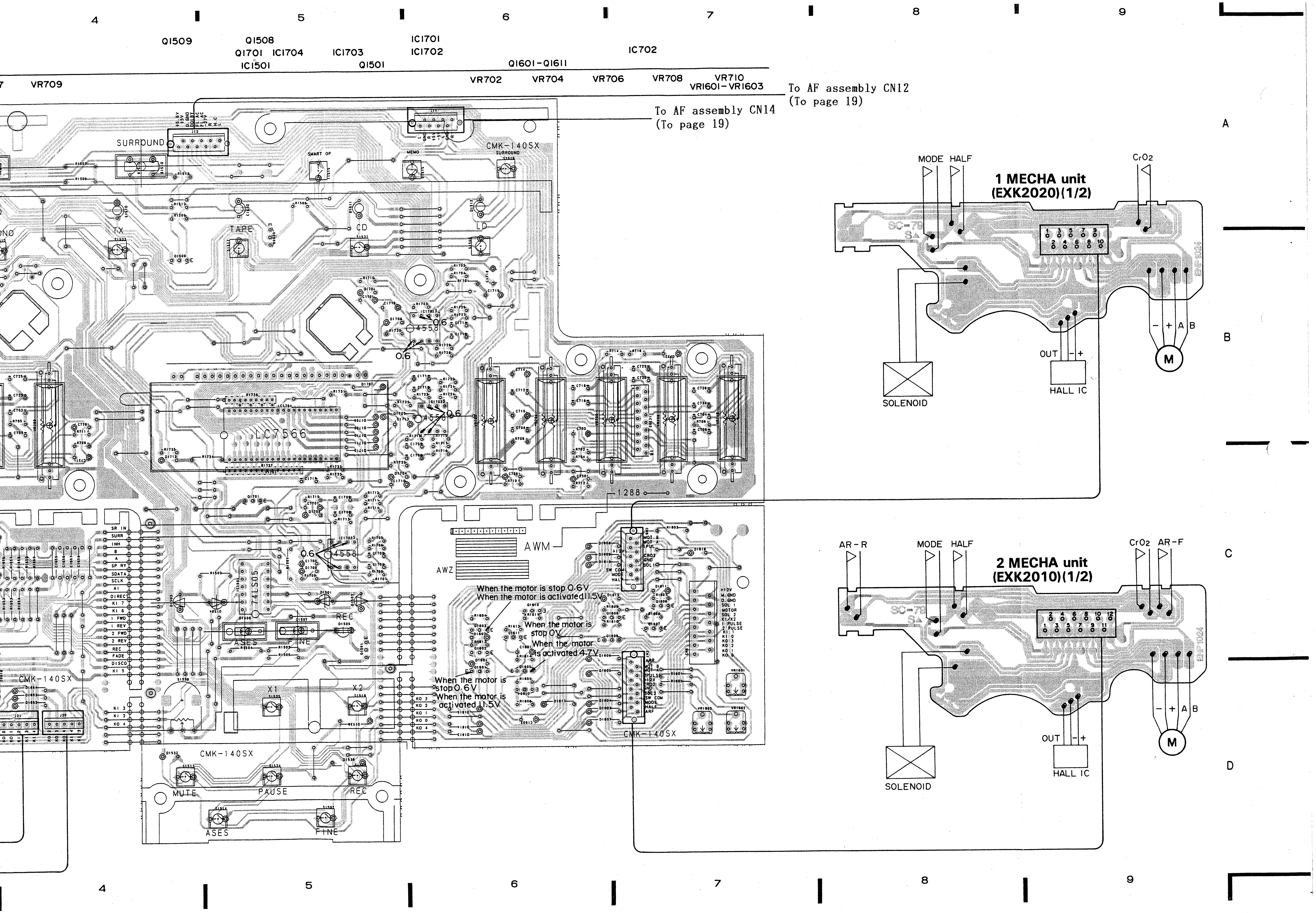

S1557
CMK-140SX
S1558
AWZ
S1559
S1556
J21
S1560

## 1 MECHA SW assembly


S1551
CMK-140SX
S1552
AWZ
S1554
S1553
J20
S1555


1
2
3
4
5
6
7
Q1503-Q1507 IC1502
IC701
Q1509
Q1508
Q1701 IC1704
IC1501
IC1703
Q1501
IC1701
IC1702
IC702
IC1652
IC1651
Q1601-Q1611
VR701
VR703
VR705
VR707
VR709
VR702
VR704
VR706
VR708
VR1601-
ANP1453-C
To AF assemb
(To page 19)
SURROUND
J12
AI
STAND-BY
PHONO
TX
TAPE
CD
LD
SMART OP
MEMO
CMK-140SX
SURROUND
74LS03
LC7566
4558
0.6
-4.6
1288
To AF assembly CN10
(To page 19)
CN11
CN10
AWM
AWZ
When the motor is stop 0.6V
When the motor is activated 11.5V
When the motor is stop 0V
When the motor is activated 4.7V
When the motor is stop 0.6V
When the motor is activated 11.5V
74LS05
ASES
FINE
REC
X1
X2
CMK-140SX
J21
J20
KO 3
KO 2
KO 1
KO 0
KO 4
MOT B
MOT A
1PUL
CRO2
GND
SOL1
SW COM
MODE
HALF
ARR
2PULSE
+12V
SOL2
ARF
CMK-140SX
MUTE
PAUSE
REC
ASES
FINE
To AF assembly CN11
(To page 19)
1
2
3
4
5
6
7

**DISPLAY assembly (AWZ3409)**


4
5
6
7
8
9
A
B
C
D
Q1509
Q1508
Q1701
IC1704
IC1501
IC1703
Q1501
IC1701
IC1702
Q1601-Q1611
IC702
VR709
VR702
VR704
VR706
VR708
VR710
VR1601-VR1603
SURROUND
CMK-140SX
SURROUND
SMART OP
MEMO
TAPE
CD
TX
LD
4558
0.6
LC7566
AWM
AWZ
74LS05
REC
ASES
FINE
X1
X2
1288
MUTE
PAUSE
REC
ASES
FINE
CMK-140SX
CMK-140SX
CMK-140SX
SR IN
SURR
INH
B
A
SP RY
SDATA
SCLK
AI
DIRECT
KI 7
KI 6
1 FWD
1 REV
2 FWD
2 REV
REC
FADE
DISCO
KI 5
KI 3
KI 2
KO 4
KO 3
KO 2
KO 1
KO 0
KO 4
MODE
HALF
CrO2
SOLENOID
OUT
-
+
HALL IC
-
+
A
B
M
AR-R
MODE
HALF
CrO2
AR-F
SOLENOID
OUT
-
+
HALL IC
-
+
A
B
M

To AF assembly CN12
(To page 19)

To AF assembly CN14
(To page 19)

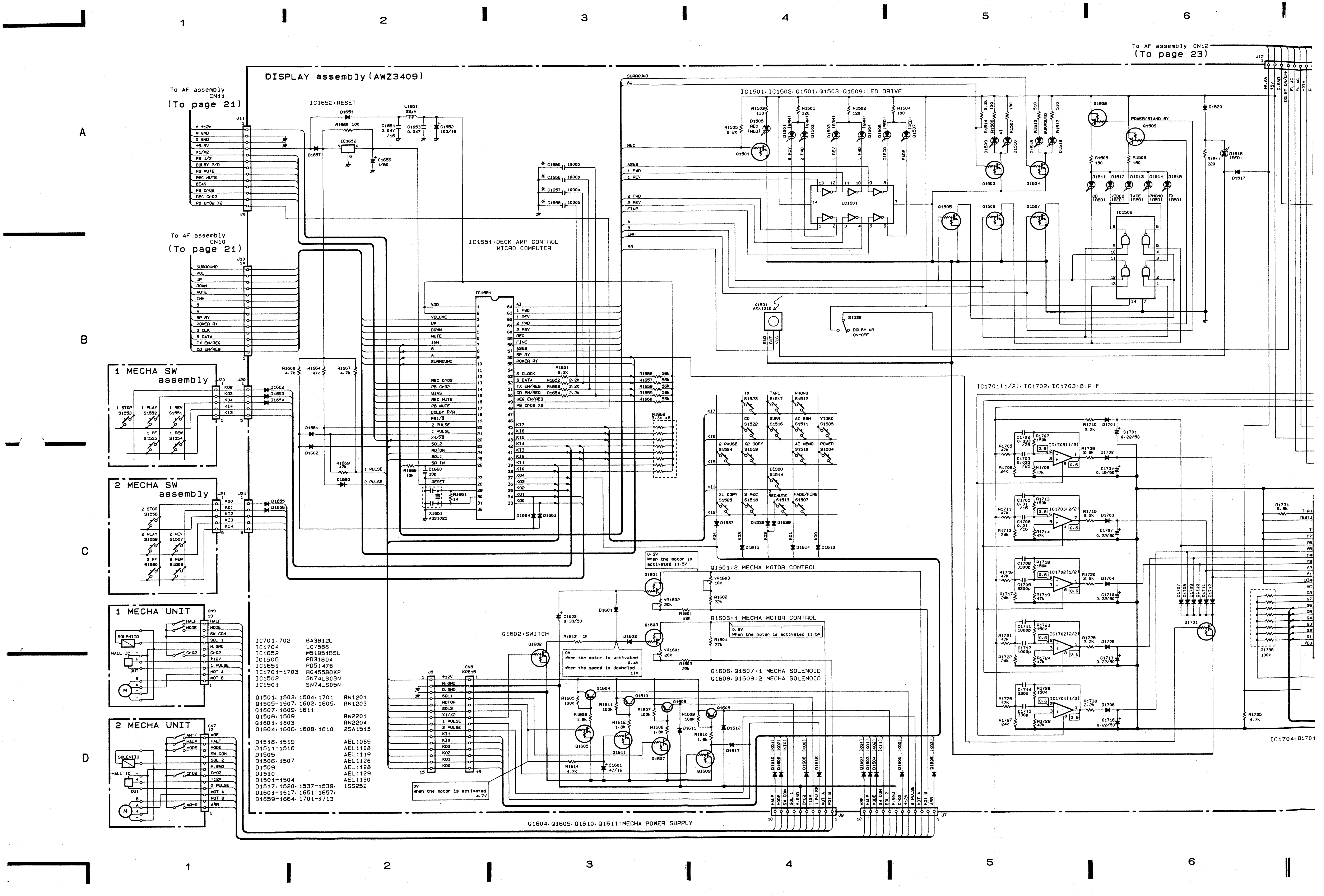
**1 MECHA unit
(EXK2020)(1/2)**

**2 MECHA unit
(EXK2010)(1/2)**

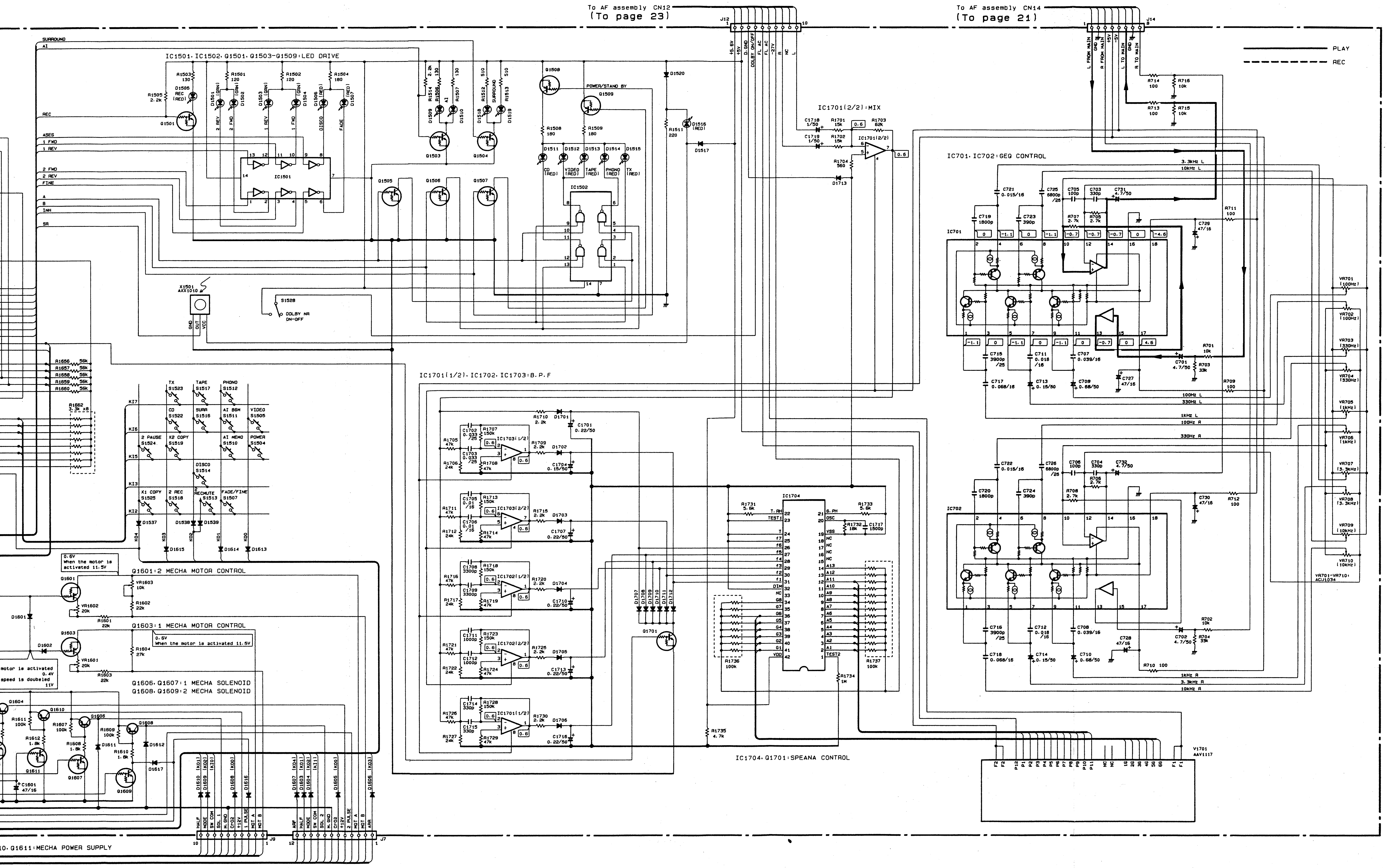
When the motor is stop 0.6V
When the motor is activated 11.5V

When the motor is stop 0V
When the motor is activated 4.7V

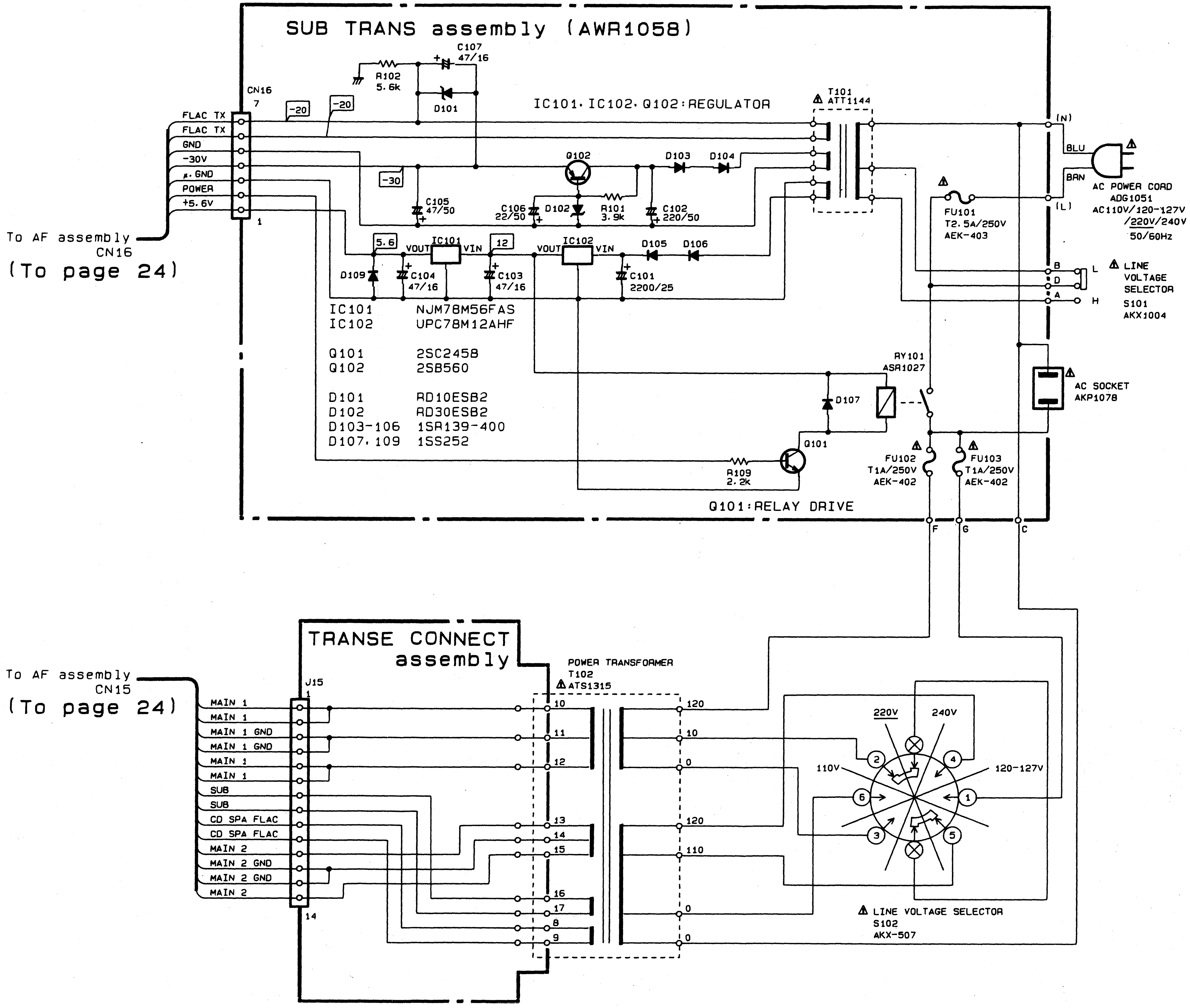
When the motor is stop 0.6V
When the motor is activated 11.5V


DISPLAY assembly (AWZ3409)
To AF assembly CN11 (To page 21)
To AF assembly CN10 (To page 21)
To AF assembly CN12 (To page 23)
IC1652: RESET
IC1651: DECK AMP CONTROL MICRO COMPUTER
IC1501, IC1502, Q1501, Q1503-Q1509: LED DRIVE
IC1701(1/2), IC1702, IC1703: B.P.F
1 MECHA SW assembly
2 MECHA SW assembly
1 MECHA UNIT
2 MECHA UNIT
Q1601: 2 MECHA MOTOR CONTROL
Q1603: 1 MECHA MOTOR CONTROL
Q1602: SWITCH
Q1606, Q1607: 1 MECHA SOLENOID
Q1608, Q1609: 2 MECHA SOLENOID
Q1604, Q1605, Q1610, Q1611: MECHA POWER SUPPLY
0.6V When the motor is activated 11.5V
0V When the motor is activated 0.4V When the speed is doubeled 11V
0V When the motor is activated 4.7V
POWER/STAND BY
S1528 DOLBY NR ON-OFF
X1501 AXX1010
IC1704, Q1701
1
2
3
4
5
6
A
B
C
D

| | |
|---|---|
| IC701, 702 | BA3812L |
| IC1704 | LC7566 |
| IC1652 | M51951BSL |
| IC1505 | PD3180A |
| IC1651 | PD5147B |
| IC1701-1703 | RC4558DXP |
| IC1502 | SN74LS03N |
| IC1501 | SN74LS05N |
| Q1501, 1503, 1504, 1701 | RN1201 |
| Q1505-1507, 1602, 1605, Q1607, 1609, 1611 | RN1203 |
| Q1508, 1509 | RN2201 |
| Q1601, 1603 | RN2204 |
| Q1604, 1606, 1608, 1610 | 2SA1515 |
| D1518, 1519 | AEL1065 |
| D1511-1516 | AEL1108 |
| D1505 | AEL1119 |
| D1506, 1507 | AEL1126 |
| D1509 | AEL1128 |
| D1510 | AEL1129 |
| D1501-1504 | AEL1130 |
| D1517, 1520, 1537-1539, D1601-1617, 1651-1657, D1659-1664, 1701-1713 | 1SS252 |

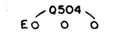
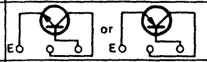
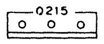
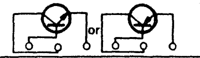
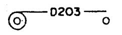
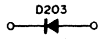
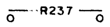
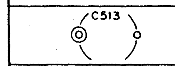
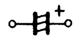
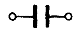

To AF assembly CN12
(To page 23)
J12
+5.6V
+5V
D.GND
DOLBY ON/OFF
FL AC
FL AC
-27V
R
NC
L
To AF assembly CN14
(To page 21)
J14
L FROM MAIN
GND
R FROM MAIN
+5V
-5V
L TO MAIN
GND
R TO MAIN
PLAY
REC
SURROUND
AI
IC1501, IC1502, Q1501, Q1503–Q1509 : LED DRIVE
REC
ASES
1 FWD
1 REV
2 FWD
2 REV
FINE
A
B
INH
SR
IC1501
IC1502
POWER/STAND BY
CD (RED)
VIDEO (RED)
TAPE (RED)
PHONO (RED)
TX (RED)
X1501 AXX1010
GND
OUT
VCC
S1528
DOLBY NR ON-OFF
D1520
D1516 (RED)
D1517
IC1701(2/2) : MIX
IC1701(1/2), IC1702, IC1703 : B.P.F
IC1703(1/2)
IC1703(2/2)
IC1702(1/2)
IC1702(2/2)
IC1701(1/2)
IC701, IC702 : GEQ CONTROL
IC701
IC702
3.3kHz L
10kHz L
100Hz L
330Hz L
1kHz L
100Hz R
330Hz R
1kHz R
3.3kHz R
10kHz R
VR701 (100Hz)
VR702 (100Hz)
VR703 (330Hz)
VR704 (330Hz)
VR705 (1kHz)
VR706 (1kHz)
VR707 (3.3kHz)
VR708 (3.3kHz)
VR709 (10kHz)
VR710 (10kHz)
VR701–VR710 : ACU1034
KI7
KI6
KI5
KI3
KI2
TX S1523
TAPE S1517
PHONO S1512
CD S1522
SURR S1516
AI BGM S1511
VIDEO S1505
2 PAUSE S1524
X2 COPY S1519
AI MEMO S1510
POWER S1504
DISCO S1514
X1 COPY S1525
2 REC S1518
RECMUTE S1513
FADE/FINE S1507
KO4
KO3
KO2
KO1
KO0
0.6V
When the motor is activated 11.5V
Q1601 : 2 MECHA MOTOR CONTROL
Q1603 : 1 MECHA MOTOR CONTROL
0.6V
When the motor is activated 11.5V
motor is activated
0.4V
speed is doubeled
11V
Q1606, Q1607 : 1 MECHA SOLENOID
Q1608, Q1609 : 2 MECHA SOLENOID
IC1704
IC1704, Q1701 : SPEANA CONTROL
V1701 AAV1117
J9
HALF
MODE
SW COM
SOL 1
M.GND
CrO2
+12V
1 PULSE
MOT A
MOT B
J7
ARR
HALF
MODE
SW COM
SOL 2
M.GND
CrO2
+12V
2 PULSE
MOT A
MOT B
ARR
10, Q1611 : MECHA POWER SUPPLY

## 2.5 SUB TRANS (AWR1058) and TRANS CONNECT assembly


SUB TRANS assembly (AWR1058)
A
B
C
D
C107
47/16
R102
5.6k
D101
CN16
7
1
-20
-20
-30
IC101, IC102, Q102:REGULATOR
FLAC TX
FLAC TX
GND
-30V
μ. GND
POWER
+5.6V
To AF assembly
CN16
(To page 24)
Q102
D103
D104
C105
47/50
C106
22/50
D102
R101
3.9k
C102
220/50
5.6
IC101
VOUT
VIN
12
IC102
VOUT
VIN
D105
D106
D109
C104
47/16
C103
47/16
C101
2200/25
IC101 NJM78M56FAS
IC102 UPC78M12AHF
Q101 2SC2458
Q102 2SB560
D101 RD10ESB2
D102 RD30ESB2
D103-106 1SR139-400
D107, 109 1SS252
T101
ATT1144
(N)
BLU
BRN
(L)
AC POWER CORD
ADG1051
AC110V/120-127V
/220V/240V
50/60Hz
FU101
T2.5A/250V
AEK-403
B
D
A
L
H
LINE
VOLTAGE
SELECTOR
S101
AKX1004
RY101
ASR1027
D107
AC SOCKET
AKP1078
Q101
R109
2.2k
FU102
T1A/250V
AEK-402
FU103
T1A/250V
AEK-402
Q101:RELAY DRIVE
F
G
C
TRANSE CONNECT
assembly
To AF assembly
CN15
(To page 24)
J15
1
14
MAIN 1
MAIN 1
MAIN 1 GND
MAIN 1 GND
MAIN 1
MAIN 1
SUB
SUB
CD SPA FLAC
CD SPA FLAC
MAIN 2
MAIN 2 GND
MAIN 2 GND
MAIN 2
POWER TRANSFORMER
T102
ATS1315
10
11
12
13
14
15
16
17
8
9
120
10
0
120
110
0
0
220V
240V
110V
120-127V
2
4
6
1
3
5
LINE VOLTAGE SELECTOR
S102
AKX-507

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

| P.C.B. pattern diagram indication | Corresponding part symbol | Part Name |
|---|---|---|
|  |  | Transistor |
|  |  | Radiator type transistor |
|  |  | Diode |
|  | | Resistor |
|  |  | Capacitor (Polarity) |
| |  | Capacitor (Non-polarity) |

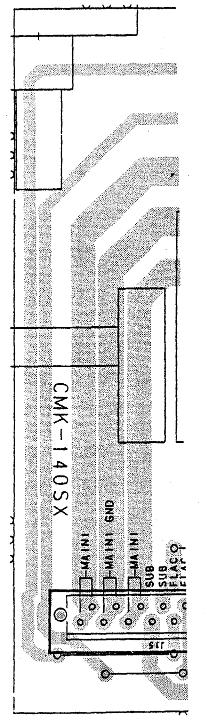
Others

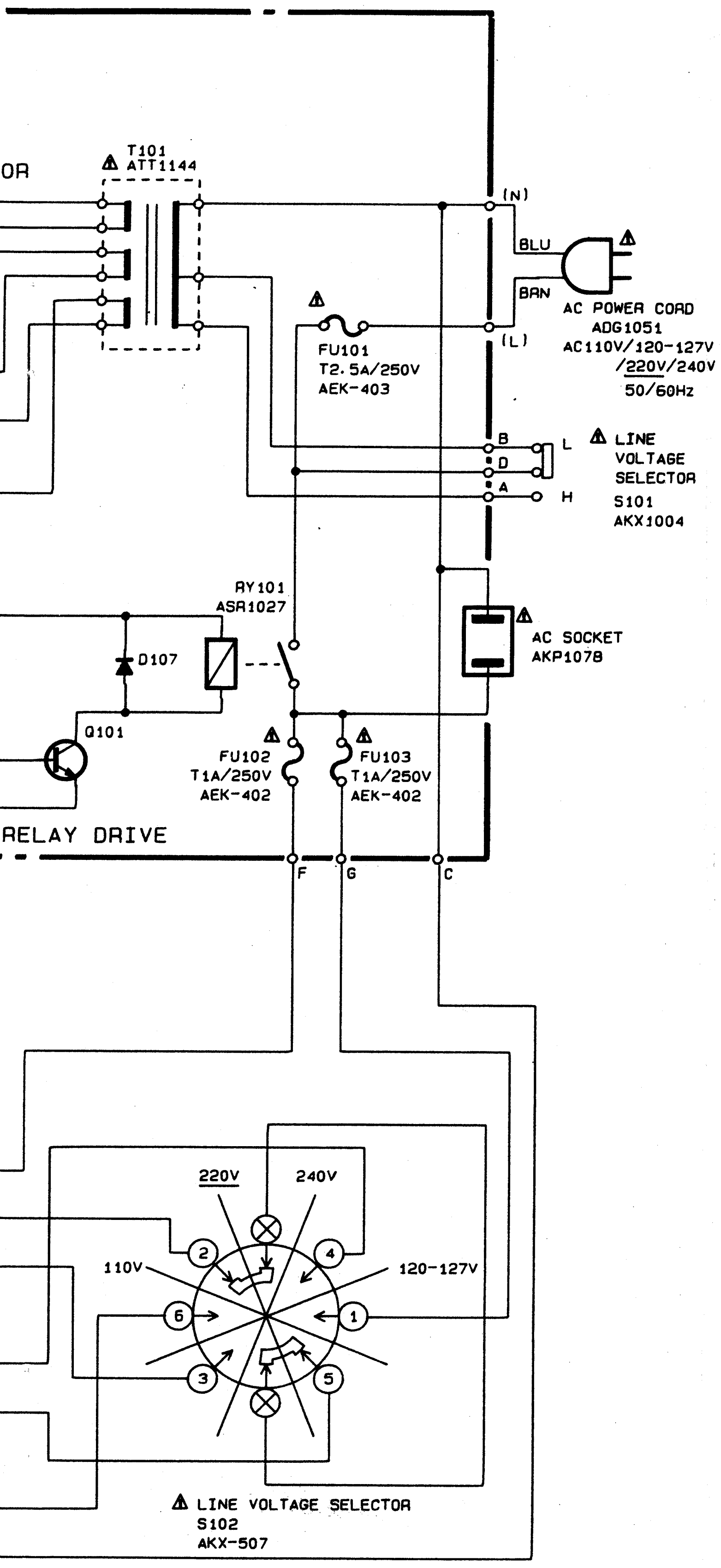
| P.C.B. pattern diagram indication | Part Name |
|---|---|
| IC | IC |
| S | Switch |
| RY | Relay |
| L | Coil |
| F | Filter |
| VR | Variable resistor or Semi-fixed resistor |

3. The capacitor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

⚠
VOL
SELE
SIOI

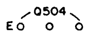
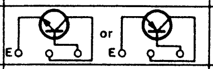
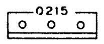
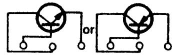
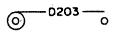
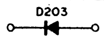
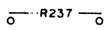
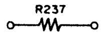
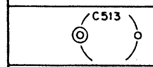
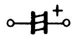
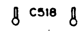
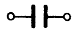
TRANS CONI


CMK-140SX
MAIN1
MAIN1 GND
MAIN1
SUB
SUB
FLAC
J15


OR
T101
ATT1144
(N)
BLU
BRN
(L)
AC POWER CORD
ADG1051
AC110V/120-127V
/220V/240V
50/60Hz
FU101
T2.5A/250V
AEK-403
B
D
A
L
H
LINE
VOLTAGE
SELECTOR
S101
AKX1004
RY101
ASR1027
D107
Q101
AC SOCKET
AKP1078
FU102
T1A/250V
AEK-402
FU103
T1A/250V
AEK-402
RELAY DRIVE
F
G
C
220V
240V
110V
120-127V
2
4
6
1
3
5
LINE VOLTAGE SELECTOR
S102
AKX-507

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

| P.C.B. pattern diagram indication | Corresponding part symbol | Part Name |
|---|---|---|
|  |  | Transistor |
|  |  | Radiator type transistor |
|  |  | Diode |
|  |  | Resistor |
|  |  | Capacitor (Polarity) |
|  |  | Capacitor (Non-polarity) |

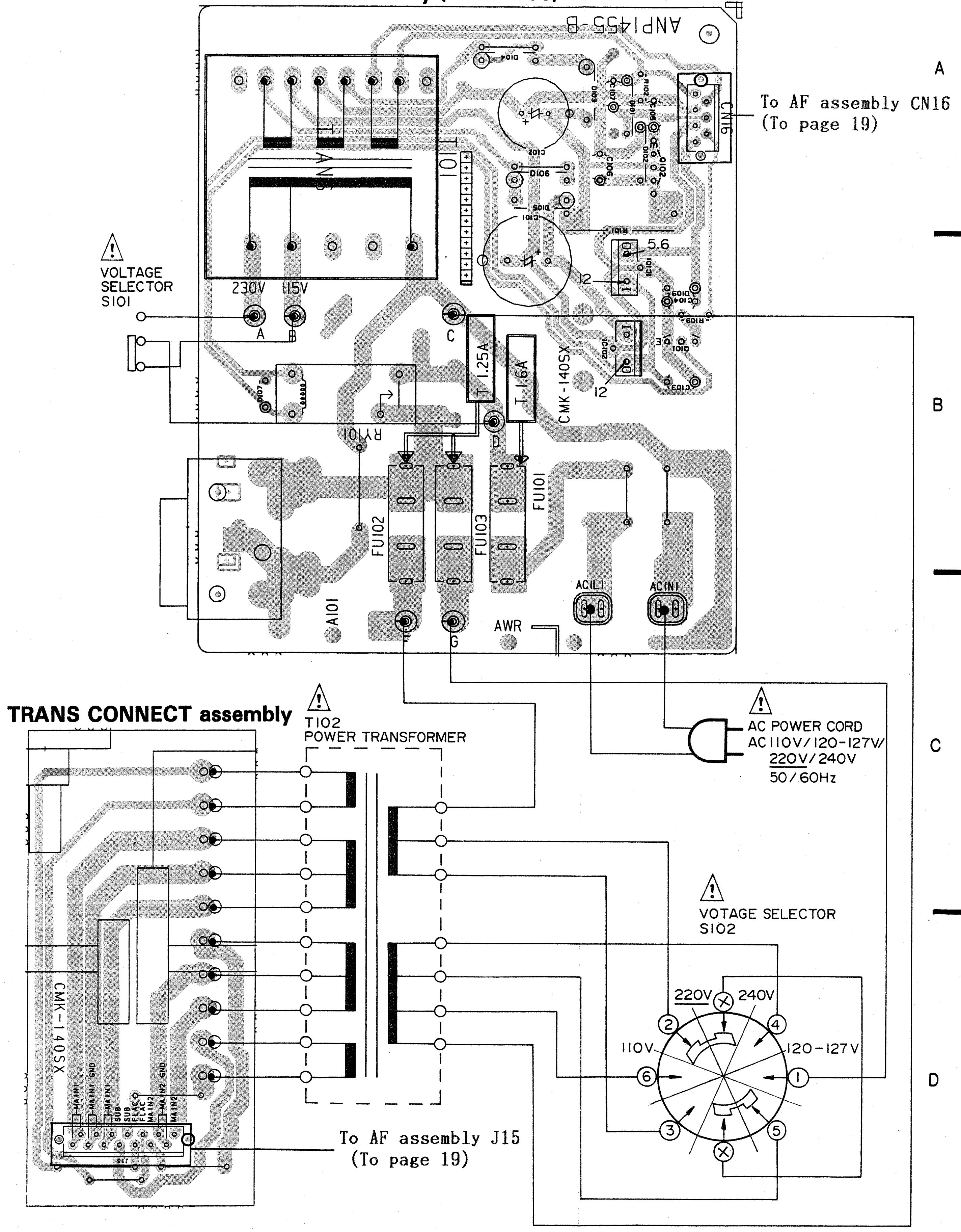
Others

| P.C.B. pattern diagram indication | Part Name |
|---|---|
| IC | IC |
| S | Switch |
| RY | Relay |
| L | Coil |
| F | Filter |
| VR | Variable resistor or Semi-fixed resistor |

3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

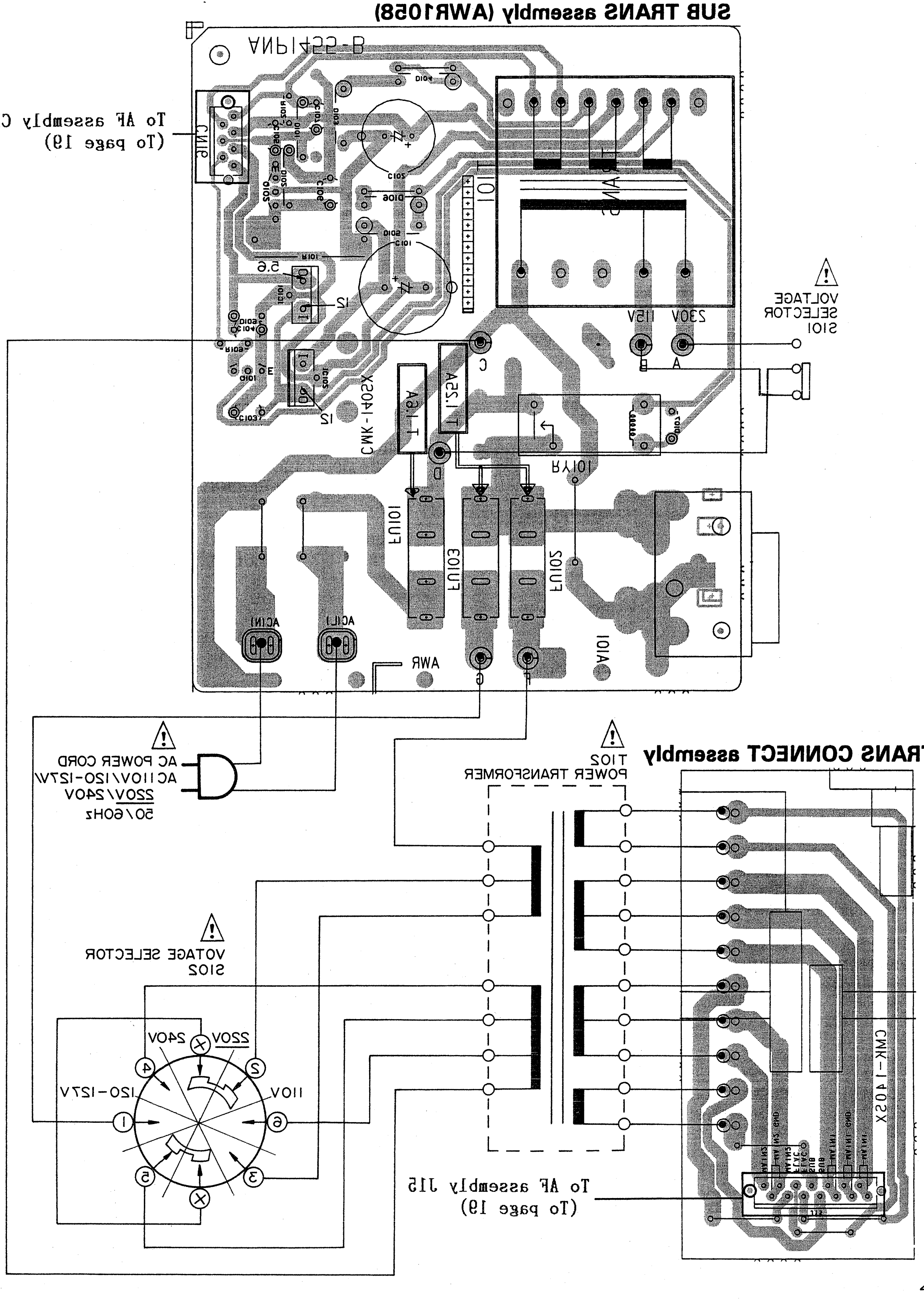
## SUB TRANS assembly (AWR1058)

## TRANS CONNECT assembly


ANP1455-B
CN16
To AF assembly CN16
(To page 19)
VOLTAGE
SELECTOR
S101
230V
115V
A
B
C
D
T 1.25A
T 1.6A
CMK-140SX
RY101
5.6
12
12
FU101
FU102
FU103
A101
AC(L)
AC(N)
AWR
G
T102
POWER TRANSFORMER
AC POWER CORD
AC110V/120-127V/
220V/240V
50/60Hz
VOTAGE SELECTOR
S102
220V
240V
110V
120-127V
2
4
6
1
3
5
CMK-140SX
To AF assembly J15
(To page 19)

## SUB TRANS assembly (AWR1058)

## TRANS CONNECT assembly


A
B
C
D
To AF assembly CN16
(To page 19)
CN16
ANP1455-B
C101
C102
C103
D101
D102
D103
D104
D105
D106
R101
IC101
IC102
5.6
12
VOLTAGE
SELECTOR
S101
115V
230V
A
B
C
D
RY101
CWK-1405X
T1.6A
T1.25A
FU101
FU102
FU103
AC(N)
AC(L)
AWR
G
F
AC POWER CORD
AC110V/120-127V/
220V/240V
50/60Hz
T102
POWER TRANSFORMER
VOTAGE SELECTOR
S102
240V
220V
120-127V
110V
1
2
3
4
5
6
To AF assembly J15
(To page 19)
CWK-1405X
J15

# 3. P.C.B 's PARTS LIST

*NOTES:*

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

*Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).*

*560Ω 56 × $10^1$ 561..........................RD1/4PS* $\boxed{5}\ \boxed{6}\ \boxed{1}$ *J*
*47kΩ 47 × $10^3$ 473..........................RD1/4PS* $\boxed{4}\ \boxed{7}\ \boxed{3}$ *J*
*0.5Ω 0R5..............................................RN2H* $\boxed{0}\ \boxed{R}\ \boxed{5}$ *K*
*1Ω 010..............................................RS1P* $\boxed{0}\ \boxed{1}\ \boxed{0}$ *K*

*Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).*
*5.62kΩ 562 × $10^1$ 5621.......................RN1/4SR* $\boxed{5}\ \boxed{6}\ \boxed{2}\ \boxed{1}$ *F*

## ◉ AF ASSEMBLY (AWZ3335)

### SEMICONDUCTORS

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | IC1001 | OP−AMP IC | RC4558DXP |
| | IC151 | REGULATOR IC | NJM78M05FAS |
| | IC152 | REGULATOR IC | NJM79M05FA |
| | IC153, 154 | REGULATOR IC | MC7812CT |
| | IC155 | IC PROTECTOR | ICP−N75 |
| | IC2001 | OP−AMP IC | RC4558DXP |
| | IC2002 | LOGIC IC | TC4066BP |
| | IC2201 | OP−AMP IC | RC4558DXP |
| | IC2202 | LOGIC IC | SN74LS05N |
| | IC2302 | DOLBY−B IC | CXA1100P |
| | IC301 | AUDIO IC | STK4142−2GP |
| | IC601 | OP−AMP IC | RC4558DXP |
| | IC801 | LOGIC IC | MC14052BCP |
| | IC802 | LOGIC IC | TC4066BP |
| | IC803, 833 | OP−AMP IC | RC4558DXP |
| | Q2001−2004 | TRANSISTOR | 2SC2458 |
| | Q2005, 2006 | TRANSISTOR | 2SC2878 |
| | Q2007 | TRANSISTOR | RN2203 |
| | Q2008 | TRANSISTOR | RN2201 |
| | Q2009, 2201 | TRANSISTOR | RN1201 |
| | Q2202 | TRANSISTOR | RN2203 |
| | Q2203, 2204 | TRANSISTOR | 2SC2878 |
| | Q2301−2304 | TRANSISTOR | 2SC2458 |
| | Q2351 | TRANSISTOR | RN2203 |
| | Q401−403 | TRANSISTOR | 2SC2458 |
| | Q404 | TRANSISTOR | RN1203 |
| | Q405 | TRANSISTOR | 2SC2458 |
| | Q406 | TRANSISTOR | 2SA1048 |
| | Q601 | TRANSISTOR | RN2203 |
| | Q602 | N−FET | 2SK246 |
| | Q801 | TRANSISTOR | RN2203 |
| | Q802 | TRANSISTOR | RN1203 |
| | Q803 | TRANSISTOR | RN2203 |
| | D151 | DIODE | D3SBA20 (A) |
| | D152−159 | DIODE | 1SR139−400 |
| | D161 | ZENER DIODE | RD8.2ESB2 |
| | D162 | DIODE | 1SS252 |
| | D2301, 2302 | DIODE | 1SS252 |
| | D401 | ZENER DIODE | RD22EB |
| | D403 | DIODE | 1SR139−400 |
| | D404 | DIODE | 1SS252 |
| | D405 | ZENER DIODE | RD6.8ESB2 |
| | D406, 601 | DIODE | 1SS252 |

### RELAY

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | RY401 | RELAY | ASR1035 |

### COILS

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | L151 | AXIAL INDUCTOR | LAU2R2K |
| | L2201, 2202 | INDUCTOR | LTA392J |
| | L501, 502 | COIL | ATH−133 |
| | F2351−2352 | DOLBY FILTER | ATF1064 |

### CAPACITORS

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | C1001−1004 | CERAMIC CAPACITOR | CCMSL101J50 |
| | C1005 | CERAMIC CAPACITOR | CKSQYB152K50 |
| | C1006 | CERAMIC CAPACITOR | CKDYB152K50 |
| | C1007, 1008 | CERAMIC CAPACITOR | CKDYB562K50 |
| | C1009−1012 | ELECTR.CAPACITOR | CEAS2R2M50 |
| | C1015, 1016 | ELECTR.CAPACITOR | CEAS470M16 |
| | C151, 152 | ELECTROLYTIC CAPACIT (2200/42) | ACH1109 |
| | C153 | ELECTR.CAPACITOR | CEAS222M16 |
| | C154 | ELECTR.CAPACITOR | CEAS102M16 |
| | C155, 156 | ELECTR.CAPACITOR | CEAS220M16 |
| | C157 | ELECTR.CAPACITOR | CEAS222M25 |
| | C158, 159 | ELECTR.CAPACITOR | CEAS220M25 |
| | C160 | ELECTR.CAPACITOR | CEAS100M25 |
| | C161 | CERAMIC CAPACITOR | CKDYB103K500 |
| | C162 | CKA (0.01/AC250V) | ACG1005 |

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | C2007, 2008 | MYLOR FILM CAPACITOR | CQMA273J50 |
| | C2009, 2010 | MYLOR FILM CAPACITOR | CQMA183J50 |
| | C2011, 2012 | CERAMIC CAPACITOR | CKSQYB152K50 |
| | C2201–2204 | ELECTR.CAPACITOR | CEAS010M50 |
| | C2205, 2206 | CHIP CAPACITOR | CKSQYB222K50 |
| | C2207, 2208 | AUDIO FILM CAPACITOR | CFTXA104J50 |
| | C2209, 2210 | ELECTR.CAPACITOR | CEAS330M16 |
| | C2211, 2212 | CERAMIC CAPACITOR | CKCYX183M25 |
| | C2213, 2214 | MYLOR FILM CAPACITOR | CQMA752J50 |
| | C2215, 2216 | CERAMIC CAPACITOR | CKSQYB562K50 |
| | C2217, 2218 | MYLOR FILM CAPACITOR | CQMA273J50 |
| | C2221, 2222 | ELECTR.CAPACITOR | CEAS2R2M50 |
| | C2225, 2226 | ELECTR.CAPACITOR | CEAS470M16 |
| | C2303, 2304 | ELECTR.CAPACITOR | CEAS010M50 |
| | C2305 | ELECTR.CAPACITOR | CEAS220M16 |
| | C2306 | ELECTR.CAPACITOR | CEAS220M25 |
| | C2351, 2352 | ELECTR.CAPACITOR | CEAS100M50 |
| | C2353, 2354 | ELECTR.CAPACITOR | CEASR22M50 |
| | C2355 | ELECTR.CAPACITOR | CEAS101M10 |
| | C2356–2359 | ELECTR.CAPACITOR | CEAS100M50 |
| | C301, 302 | ELECTR.CAPACITOR | CEAS2R2M50 |
| | C303, 304 | CERAMIC CAPACITOR | CKMYB331K50 |
| | C305, 306 | ELECTR.CAPACITOR | CEAS220M50 |
| | C307, 308 | ELECTR.CAPACITOR | CEAS101M25 |
| | C309 | ELECTR.CAPACITOR | CEANP220M50 |
| | C310 | ELECTR.CAPACITOR | CEANP100M50 |
| | C311, 312 | ELECTR.CAPACITOR | CEAS100M50 |
| | C313 | ELECTROLYTIC CAPACIT (47/50) | ACH1143 |
| | C401–404 | CERAMIC CAPACITOR | CKCYF473Z50 |
| | C405 | ELECTR.CAPACITOR | CEAS221M16 |
| | C406 | ELECTR.CAPACITOR | CEAS330M25 |
| | C407 | ELECTR.CAPACITOR | CEAS221M16 |
| | C408 | ELECTR.CAPACITOR | CEAS100M50 |
| | C501 | ELECTR.CAPACITOR (5600/50) | ACH1144 |
| | C601, 602 | CERAMIC CAPACITOR | CKMYB471K50 |
| | C603, 604 | ELECTR.CAPACITOR | CEAS2R2M50 |
| | C605 | CERAMIC CAPACITOR | CKSQYB681K50 |
| | C606 | CERAMIC CAPACITOR | CKCYF473Z50 |
| | C831, 832 | CERAMIC CAPACITOR | CCMSL101J50 |

## RESISTORS

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | VR2201, 2202 | VR | VRTB6VS222 |
| | R1013 | CHIP RESISTOR | RS1/10S104J |
| | R159–162 | CARBON FILM RESISTOR | RD1/4PM100J |
| | R163, 164 | METAL OXIDE RESISTOR | RS2LMFR22J |
| | R2003, 2004 | CHIP RESISTOR | RS1/10S122J |
| | R2005, 2006 | CHIP RESISTOR | RS1/10S105J |
| | R2007, 2008 | CHIP RESISTOR | RS1/10S332J |
| | R2009, 2010 | CHIP RESISTOR | RS1/10S105J |
| | R2011 | CHIP RESISTOR | RS1/10S472J |
| | R2014 | CHIP RESISTOR | RS1/10S472J |
| | R2016 | CHIP RESISTOR | RS1/10S472J |
| | R2019, 2020 | CHIP RESISTOR | RS1/10S154J |
| | R2021, 2022 | CHIP RESISTOR | RS1/10S222J |
| | R2207, 2208 | CHIP RESISTOR | RS1/10S104J |
| | R2209, 2210 | CHIP RESISTOR | RS1/10S683J |
| | R2211, 2212 | CHIP RESISTOR | RS1/10S223J |
| | R2213, 2214 | CHIP RESISTOR | RS1/10S333J |
| | R2223, 2224 | CHIP RESISTOR | RS1/10S471J |
| | R2226 | CHIP RESISTOR | RS1/10S681J |
| | R2233, 2234 | CHIP RESISTOR | RS1/10S102J |
| | R2301, 2302 | CHIP RESISTOR | RS1/10S273J |
| | R2303, 2304 | CHIP RESISTOR | RS1/10S362J |
| | R2305, 2306 | CHIP RESISTOR | RS1/10S103J |
| | R2317, 2318 | CHIP RESISTOR | RS1/10S222J |
| | R2351, 2352 | CHIP RESISTOR | RS1/10S242J |
| | R2355, 2356 | CHIP RESISTOR | RS1/10S682J |
| | R2357 | CHIP RESISTOR | RS1/10S433J |
| | R2361, 2362 | CHIP RESISTOR | RS1/10S222J |
| | R2363, 2364 | CHIP RESISTOR | RS1/10S273J |
| | R2366 | CHIP RESISTOR | RS1/10S103J |
| | R305, 306 | CARBON FILM RESISTOR | RD1/4PM104J |
| | R309–312 | CARBON FILM RESISTOR | RD1/4PM222J |
| | R313 | CARBON FILM RESISTOR | RD1/4PMFL471J |
| | R314 | CARBON FILM RESISTOR | RD1/4PMFL101J |
| | R315 | CARBON FILM RESISTOR | RD1/4PM102J |
| | R316, 317 | CARBON FILM RESISTOR | RD1/4PMFL222J |
| | R318 | CARBON FILM RESISTOR | RD1/4PMFL101J |
| | R401, 402 | CARBON FILM RESISTOR | RD1/4PM100J |
| | R409 | CARBON FILM RESISTOR | RD1/2PM182J |
| | R416 | METAL OXIDE RESISTOR | RS2LMF181J |
| | R417 | METAL OXIDE RESISTOR | RS2LMF331J |
| | R501, 502 | CARBON FILM RESISTOR | RD1/4PMFL100J |
| | R805, 806 | CHIP RESISTOR | RS1/10S273J |
| | R843, 844 | CHIP RESISTOR | RS1/10S223J |
| | R855, 856 | CHIP RESISTOR | RS1/10S332J |
| | R857 | CHIP RESISTOR | RS1/10S104J |
| | R858 | CHIP RESISTOR | RS1/10S000J |
| | | Other resistors | RD1/8PM□□□J |

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| OTHERS | | | |
| | | PIN JACK (6P) | AKB1121 |
| | | 2P PIN JACK | AKB1146 |
| | | SPEAKER TERMINAL 4−P | AKE−109 |
| | | SOCKET (4P) | AKP1046 |
| | | JACK (DC) | AKN−203 |
| | | SOCKET (14P) | AKP1048 |
| | CN10 | CONNECTOR (14P) | KPE14 |
| | CN11 | CONNECTOR (13P) | KPE13 |
| | CN12 | CONNECTOR (10P) | KPE10 |
| | CN14 | CONNECTOR (8P) | KPE8 |
| | CN16 | CONNECTOR (7P) | KPE7 |
| | CN4 | CONNECTOR (13P) | KPE13 |
| | CN5 | CONNECTOR (5P) | KPE5 |
| | CN6 | CONNECTOR (4P) | KPC4 |

## VR ASSEMBLY

### SEMICONDUCTORS

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | IC551 | OP-AMP IC | RC4558DXP |
| | IC552 | MECHANISM DRIVER IC | TA7291S |
| | Q551, 552 | TRANSISTOR | 2SC2878 |
| | Q553 | TRANSISTOR | RN2203 |

### CAPACITORS

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | C551, 552 | ELECTR.CAPACITOR | CEAS4R7M50 |
| | C553, 554 | CHIP CAPACITOR | CCSQCH101J50 |
| | C555, 556 | ELECTR.CAPACITOR | CEAS101M16 |
| | C557 | ELECTR.CAPACITOR | CEAS220M25 |
| | C558 | CERAMIC CAPACITOR | CKSQYF104Z50 |
| | C559 | CERAMIC CAPACITOR | CKCYF473Z50 |

### RESISTORS

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | VR551 | VARIABLE RESISTOR (WITH MOTOR) | ACX1051 |
| | R554 | CHIP RESISTOR | RS1/10S000J |
| | R555, 556 | CHIP RESISTOR | RS1/10S104J |
| | R561 | CHIP RESISTOR | RS1/10S000J |
| | R565, 566 | CHIP RESISTOR | RS1/10S102J |
| | | Other resistors | RD1/8PM□□□J |

## HEAD PHONE ASSEMBLY

### CAPACITORS

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | C453 | CERAMIC CAPACITOR | CKDYF473Z50 |

### RESISTORS

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | R451, 452 | METAL OXIDE RESISTOR | RS1LMF331J |
| | R453 | CARBONFILM RESISTOR | RD1/8PM100J |

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| OTHERS | | | |
| | | JACK (HEAD PHONE) | AKN1010 |

## TRANS CONNECT ASSEMBLY

No parts are supplied with the TRANS CONNECT ASSEMBLY.

## ⊙ DISPLAY ASSEMBLY (AWZ3409)

### SEMICONDUCTORS

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | IC1501 | LOGIC IC | SN74LS05N |
| | IC1502 | LOGIC IC | SN74LS03N |
| | IC1651 | SYSTEM CONT. μ−COM | PD5147B |
| | IC1652 | RESET IC | M51951BSL |
| | IC1701−1703 | OP−AMP IC | RC4558DXP |
| | IC1704 | GEQ FL DRIVER IC | LC7566 |
| | IC701, 702 | AUDIO IC | BA3812L |
| | Q1501 | TRANSISTOR | RN1201 |
| | Q1503, 1504 | TRANSISTOR | RN1201 |
| | Q1505−1507 | TRANSISTOR | RN1203 |
| | Q1508, 1509 | TRANSISTOR | RN2201 |
| | Q1601 | TRANSISTOR | RN2204 |
| | Q1602 | TRANSISTOR | RN1203 |
| | Q1603 | TRANSISTOR | RN2204 |
| | Q1604 | TRANSISTOR | 2SA1515 |
| | Q1605 | TRANSISTOR | RN1203 |
| | Q1606 | TRANSISTOR | 2SA1515 |
| | Q1607 | TRANSISTOR | RN1203 |
| | Q1608 | TRANSISTOR | 2SA1515 |
| | Q1609 | TRANSISTOR | RN1203 |
| | Q1610 | TRANSISTOR | 2SA1515 |
| | Q1611 | TRANSISTOR | RN1203 |
| | Q1701 | TRANSISTOR | RN1201 |
| | D1501−1504 | LED (GREEN) | AEL1130 |
| | D1505 | LED (RED) | AEL1119 |
| | D1506, 1507 | LED (RED) | AEL1126 |
| | D1509 | LED | AEL1128 |
| | D1510 | LED (GREEN) | AEL1129 |
| | D1511−1516 | LED (RED) | AEL1108 |
| | D1517 | DIODE | 1SS252 |
| | D1518, 1519 | LED (RED) | AEL1065 |
| | D1520 | DIODE | 1SS252 |
| | D1537−1539 | DIODE | 1SS252 |
| | D1601−1617 | DIODE | 1SS252 |
| | D1651−1657 | DIODE | 1SS252 |
| | D1660−1664 | DIODE | 1SS252 |
| | D1701−1713 | DIODE | 1SS252 |

### SWITCHES

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | S1504, 1505 | SWITCH | ASG1034 |
| | S1507 | SWITCH | ASG1034 |
| | S1510−1514 | SWITCH | ASG1034 |
| | S1516−1519 | SWITCH | ASG1034 |
| | S1522−1525 | SWITCH | ASG1034 |
| | S1528 | SWITCH | ASD1012 |

### COIL

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | L1651 | AXIAL INDUCTOR | LAU220K |

### CAPACITORS

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | C1601 | ELECTR.CAPACITOR | CEAS470M16 |
| | C1602 | ELECTR.CAPACITOR | CEASR33M50 |
| | C1651 | CERAMIC CAPACITOR | CKDYX473M16 |
| | C1652 | ELECTR.CAPACITOR | CEAS101M16 |
| | C1653 | CERAMIC CAPACITOR | CKCYF473Z50 |
| | C1655−1658 | CERAMIC CAPACITOR | ACG1020 |
| | C1659 | ELECTR.CAPACITOR | CEAS010M50 |
| | C1660 | CERAMIC CAPACITOR | CCDSL100D50 |
| | C1701 | ELECTR.CAPACITOR | CEASR22M50 |
| | C1702, 1703 | CERAMIC CAPACITOR | CKDYX333M25 |
| | C1704 | ELECTROLYTIC CAPACIT | CEASR15M50 |
| | C1705, 1706 | CERAMIC CAPACITOR | CKDYX103M16 |
| | C1707 | ELECTROLYTIC CAPACIT | CEJAR22M50 |
| | C1708, 1709 | CERAMIC CAPACITOR | CKCYB332K50 |
| | C1710 | ELECTR.CAPACITOR | CEASR22M50 |
| | C1711, 1712 | CERAMIC CAPACITOR | CKMYB102K50 |
| | C1713 | ELECTR.CAPACITOR | CEASR22M50 |
| | C1714, 1715 | CERAMIC CAPACITOR | CKMYB331K50 |
| | C1716 | ELECTR.CAPACITOR | CEASR22M50 |
| | C1717 | CERAMIC CAPACITOR | CKMYB152K50 |
| | C1718, 1719 | ELECTR.CAPACITOR | CEAS010M50 |
| | C701, 702 | ELECTR.CAPACITOR | CEAS4R7M50 |
| | C703, 704 | CERAMIC CAPACITOR | CKMYB331K50 |
| | C705, 706 | CERAMIC CAPACITOR | CCDSL101J50 |
| | C707, 708 | CERAMIC CAPACITOR | CKDYX393M16 |
| | C709, 710 | ELECTR.CAPACITOR | CEASR68M50 |
| | C711, 712 | CERAMIC CAPACITOR | CKDYX183M16 |
| | C713, 714 | ELECTROLYTIC CAPACIT | CEJAR15M50 |
| | C715, 716 | CERAMIC CAPACITOR | CGMYX392M25 |
| | C717, 718 | CERAMIC CAPACITOR | CKDYX683M16 |
| | C719, 720 | CERAMIC CAPACITOR | CGMYB182M50 |
| | C721, 722 | CERAMIC CAPACITOR | CKDYX153M16 |
| | C723, 724 | CERAMIC CAPACITOR | CKMYB391K50 |
| | C725, 726 | CERAMIC CAPACITOR | CGMYX682M25 |
| | C727, 728 | ELECTR.CAPACITOR | CEAS470M16 |
| | C729, 730 | ELECTROLYTIC CAPACIT | CEJA470M16 |
| | C731, 732 | ELECTROLYTIC CAPACIT | CEJA4R7M50 |

### RESISTORS

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | VR1601, 1602 | VR (20kΩ) | VRTM6V203 |
| | VR1603 | VR (10kΩ) | VRTM6V103 |
| | VR701−710 | VR (30kΩ) | ACU1034 |
| | R1662 | RESISTOR ARRAY (3.3k) | RA8T332J |
| | R1736 | RESISTOR ARRAY (100k) | RA8T104J |
| | R1737 | RESISTOR ARRAY (100k) | RA13T104J |
| | | Other resistors | RD1/8PM□□□J |

### OTHERS

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | | REMOTE RECEIVER UNIT | AXX1010 |
| | V1701 | FL TUBE | AAV1117 |
| | X1651 | CERAMIC RESONATOR | ASS1025 |
| | CN8 | CONNECTOR (15P) | KPE15 |

## 1 MECHA SW ASSEMBLY

### SWITCHES

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | S1551−1555 | SWITCH | ASG1034 |

## 2 MECHA SW ASSEMBLY

### SWITCHES

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | S1556−1560 | SWITCH | ASG1034 |

## ⊙ SUB TRANS ASSEMBLY (AWR1058)

### SEMICONDUCTORS

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | IC101 | REGULATOR IC | NJM78M56FAS |
| | IC102 | REGULATOR IC | UPC78M12AHF |
| | Q101 | TRANSISTOR | 2SC2458 |
| | Q102 | TRANSISTOR | 2SB560 |
| | D101 | ZENER DIODE | RD10ESB2 |
| | D102 | ZENER DIODE | RD30ESB2 |
| | D103−106 | DIODE | 1SR139−400 |
| | D107, 109 | DIODE | 1SS252 |

### RELAY

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | RY101 | RELAY | ASR1027 |

### TRANSFORMER

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | T101 | POWER TRANSFORMER | ATT1144 |

CAPACITORS

| Mark No. | Description | Parts No. |
|---|---|---|
| C101 | ELECTR.CAPACITOR | CEAS222M25 |
| C102 | ELECTR.CAPACITOR | CEAS221M50 |
| C103, 104 | ELECTR.CAPACITOR | CEAS470M16 |
| C105 | ELECTR.CAPACITOR | CEAS470M50 |
| C106 | ELECTR.CAPACITOR | CEAS220M50 |
| C107 | ELECTR.CAPACITOR | CEAS470M16 |

RESISTORS

| Mark No. | Description | Parts No. |
|---|---|---|
| R101 | CARBONFILM RESISTOR | RD1/4PMF392J |
| R102 | CARBONFILM RESISTOR | RD1/8PM562J |
| R109 | CARBONFILM RESISTOR | RD1/8PM222J |

OTHERS

| Mark No. | Description | Parts No. |
|---|---|---|
| CN | AC SOCKET (1P) | AKP1078 |

## 1 MECHA ASSEMBLY

CAPACITORS

| Mark No. | Description | Parts No. |
|---|---|---|
| C2001, 2002 | CERAMIC CAPACITOR | CKMYB391K50 |
| C2005, 2006 | AUDIO FILM CAPACITOR | CFTXA223J50 |
| C2007, 2008 | ELECTR.CAPACITOR | CEAS4R7M50 |
| C2009, 2010 | ELECTR.CAPACITOR | CEAS470M10 |

RESISTORS

| Mark No. | Description | Parts No. |
|---|---|---|
| VR2001, 2002 | VR | VRTM6H202 |
| | Other resistors | RD1/8PM☐☐☐J |

## 2 MECHA ASSEMBLY

SEMICONDUCTORS

| Mark No. | Description | Parts No. |
|---|---|---|
| IC2001, 2021 | OP-AMP IC | RC4558DXP |
| Q2021, 2022 | N-FET | 2SK373 |
| Q2251 | TRANSISTOR | RN1201 |
| Q2252 | TRANSISTOR | 2SA1515 |
| Q2253, 2254 | TRANSISTOR | 2SC3377 |
| Q2255 | TRANSISTOR | 2SC2458 |
| D2021－2026 | DIODE | 1SS252 |

COILS & TRANSFORMER

| Mark No. | Description | Parts No. |
|---|---|---|
| L2204, 2205 | INDUCTOR | LTA822J |
| T2251 | OSC TRANSFORMER | ATX－043 |

CAPACITORS

| Mark No. | Description | Parts No. |
|---|---|---|
| C2021, 2022 | CERAMIC CAPACITOR | CCMSL100D50 |
| C2023, 2024 | CERAMIC CAPACITOR | CKMYB391K50 |
| C2027, 2028 | AUDIO FILM CAPACITOR | CFTXA223J50 |
| C2029, 2030 | ELECTR.CAPACITOR | CEAS4R7M50 |
| C2031, 2032 | ELECTR.CAPACITOR | CEAS470M10 |
| C2219, 2220 | CERAMIC CAPACITOR | CCDSL271K500 |
| C2223, 2224 | CERAMIC CAPACITOR | CKDYB681K50 |
| C2251 | ELECTR.CAPACITOR | CEAS470M16 |
| C2252, 2253 | CERAMIC CAPACITOR | CGMYX103M16 |
| C2254 | CERAMIC CAPACITOR | CKMYB221K50 |
| C2255 | MYLOR FILM CAPACITOR | CQMA153K50 |
| C2256 | CERAMIC CAPACITOR | CKMYB681K50 |
| C2257 | MYLOR FILM CAPACITOR | CQMA123K250 |
| C2258 | ELECTR.CAPACITOR | CEAS4R7M50 |
| C2259, 2260 | CERAMIC CAPACITOR | CCCSL101K500 |
| C2261 | MYLOR FILM CAPACITOR | CQMA562K400 |
| C2262 | CQPA (2000p/630V) | ACE1020 |
| C2263 | ELECTR.CAPACITOR | CEAS100M50 |

RESISTORS

| Mark No. | Description | Parts No. |
|---|---|---|
| VR2021, 2022 | VR | VRTM6V202 |
| VR2251, 2252 | VR | VRTM6H204 |
| R2253 | CARBON FILM RESISTOR | RD1/2PM360J |
| | Other resistors | RD1/8PM☐☐☐J |

## MIC assembly

SEMICONDUCTORS

| Mark No. | Description | Parts No. |
|---|---|---|
| IC901 | OP－AMP IC | NJM4558S－X |

CAPACITORS

| Mark No. | Description | Parts No. |
|---|---|---|
| C901 | CERAMIC CAPACITOR | CKMYB681K50 |
| C902 | ELECTR.CAPACITOR | CEAS010M50 |
| C903 | CERAMIC CAPACITOR | CKMYB471K50 |
| C904, 905 | ELECTR.CAPACITOR | CEAS100M25 |
| C906, 907 | CERAMIC CAPACITOR | CKDYX473M16 |
| C908 | CERAMIC CAPACITOR | CKDYF473Z50 |

RESISTORS

| Mark No. | Description | Parts No. |
|---|---|---|
| VR901 | VR (10kΩ) | ACS1065 |
| | Other resistors | RD1/8PM☐☐☐J |

OTHERS

| Mark No. | Description | Parts No. |
|---|---|---|
| | MIC JACK | AKN1017 |

# 4. FOR YPW TYPE

*NOTES:*
- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

## 4.1 CONTRAST OF MISCELLANEOUS PARTS

The DC−Z74/YPW type is the same as the DC−Z74/SD type with the exception of the following sections.

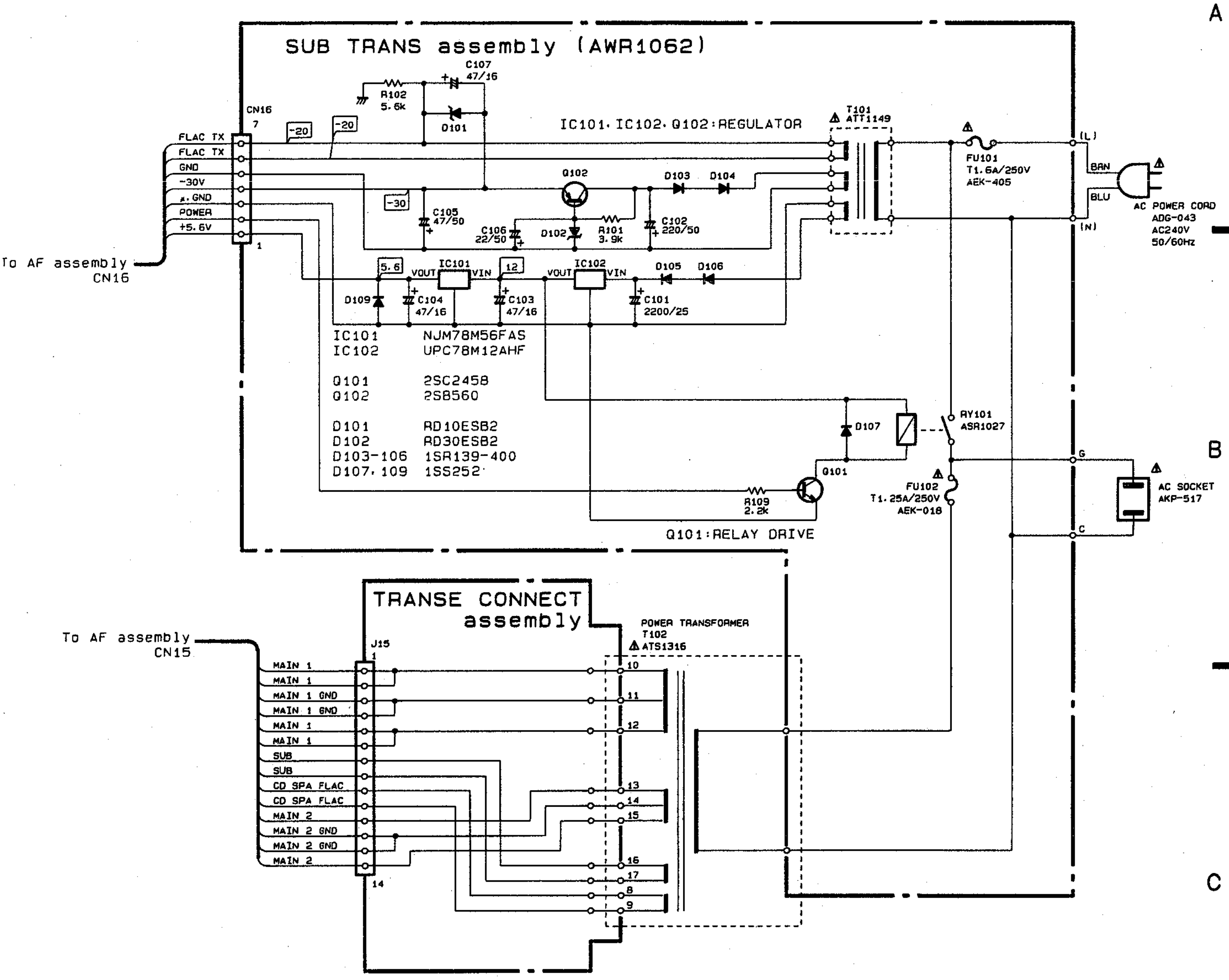
| Mark | Symbol & Description | Part No. | | Remarks |
|---|---|---|---|---|
| | | DC−Z74/SD type | DC−Z74/YPW type | |
| ⊙ | SUB TRANS assembly | AWR1058 | AWR1062 | |
| ⚠ | S101 Line voltage selector switch | AKX1004 | ............... | |
| ⚠ | S102 Line voltage selector switch | AKX−507 | ............... | |
| ⚠ | T102 Power transformer | ATS1315 | ATS1316 | |
| ⚠ | FU101 (T2.5A/250V) | AEK−403 | ............... | |
| ⚠ | FU101 (T1.6A/250V) | ............... | AEK−405 | |
| ⚠ | FU102 (T1A/250V) | AEK−402 | ............... | |
| ⚠ | FU102 (T1.25A/250V) | ............... | AEK−018 | |
| ⚠ | FU103 (T1A/250V) | AEK−402 | ............... | |
| ⚠ | AC Power cord | ADG1051 | ADG−043 | |
| ⚠ | AC socket (OUTLET 1P) | ............... | AKP−517 | |
| | Operating instructions (Spanish) | ARC1232 | ............... | |

## 4.2 SUB TRANS assembly (AWR1062)

The SUB TRANS assembly (AWR1062) is the same as the SUB TRANS assembly (AWR1058) with the exception of the following sections.

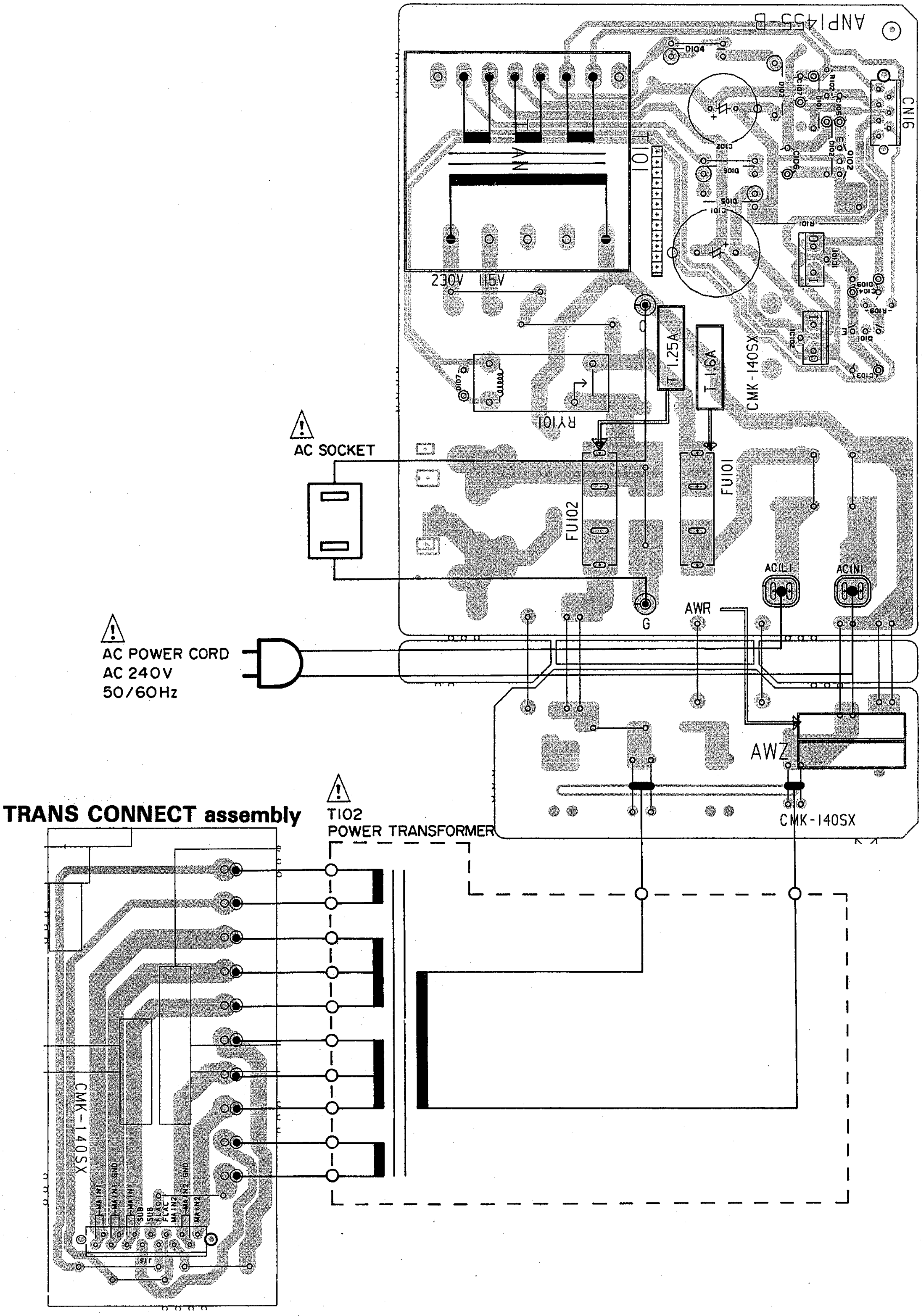
| Mark | Symbol & Description | Part No. | | Remarks |
|---|---|---|---|---|
| | | AWR1058 | AWR1062 | |
| ⚠ | T101 Power transformer | ATT1144 | ATT1149 | |
| ⚠ | AC socket (OUTLET 1P) | AKP1078 | ............... | |

## 4.3 SCHEMATIC AND P.C.BOARD DIAGRAM


SUB TRANS assembly (AWR1062)
R102
5.6k
C107
47/16
D101
IC101·IC102·Q102:REGULATOR
T101
ATT1149
FU101
T1.6A/250V
AEK-405
(L)
BRN
BLU
(N)
AC POWER CORD
ADG-043
AC240V
50/60Hz
CN16
7
1
-20
-20
-30
FLAC TX
FLAC TX
GND
-30V
≠.GND
POWER
+5.6V
To AF assembly
CN16
Q102
D103
D104
C105
47/50
C106
22/50
D102
R101
3.9k
C102
220/50
5.6
12
IC101
VOUT
VIN
IC102
VOUT
VIN
D105
D106
D109
C104
47/16
C103
47/16
C101
2200/25
IC101 NJM78M56FAS
IC102 UPC78M12AHF
Q101 2SC2458
Q102 2SB560
D101 RD10ESB2
D102 RD30ESB2
D103-106 1SR139-400
D107,109 1SS252
D107
RY101
ASR1027
Q101
R109
2.2k
FU102
T1.25A/250V
AEK-018
G
C
AC SOCKET
AKP-517
Q101:RELAY DRIVE
TRANSE CONNECT
assembly
To AF assembly
CN15
J15
1
14
MAIN 1
MAIN 1
MAIN 1 GND
MAIN 1 GND
MAIN 1
MAIN 1
SUB
SUB
CD SPA FLAC
CD SPA FLAC
MAIN 2
MAIN 2 GND
MAIN 2 GND
MAIN 2
POWER TRANSFORMER
T102
ATS1316
10
11
12
13
14
15
16
17
8
9

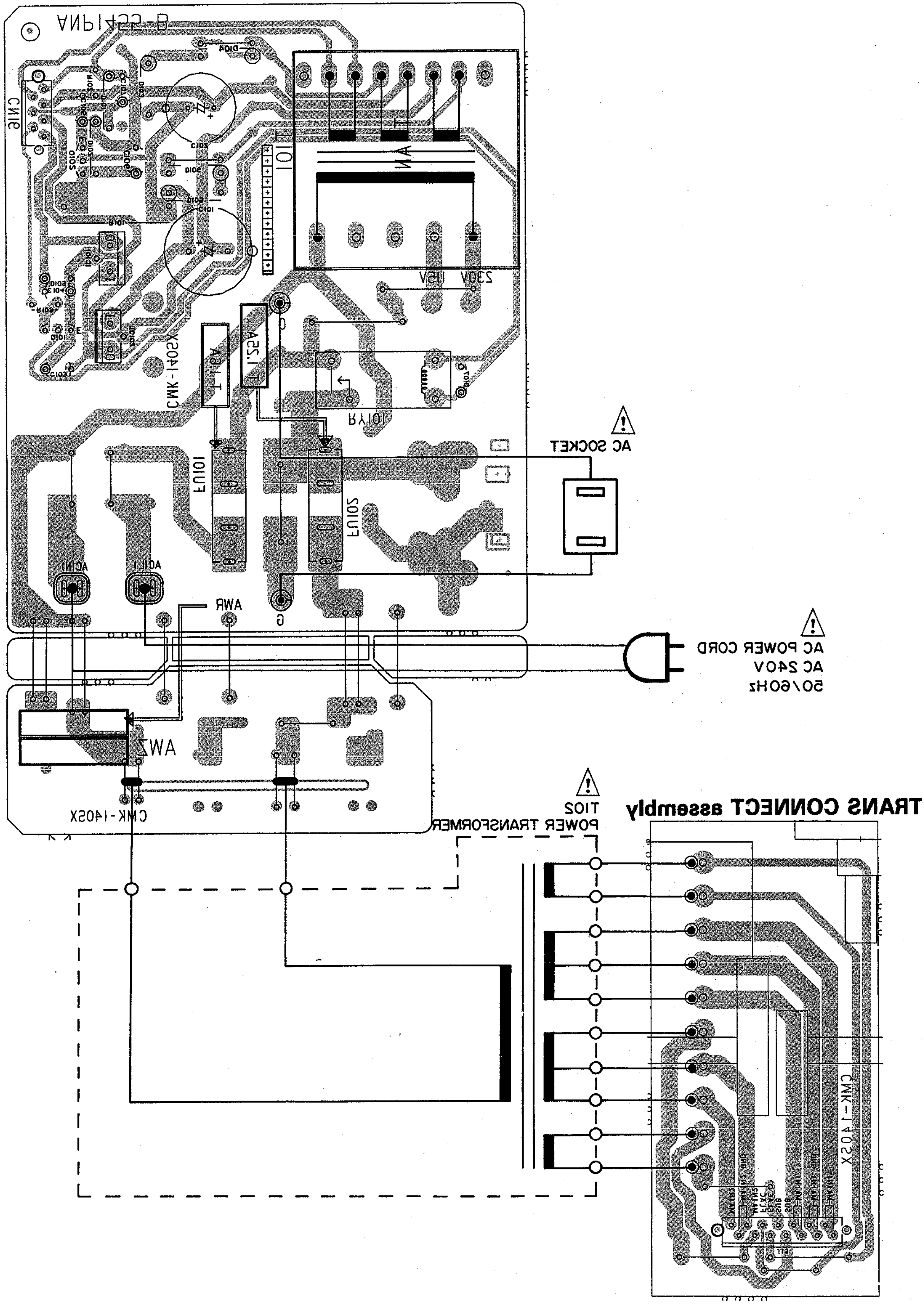
## SUB TRANS assembly (AWR1062)

## TRANS CONNECT assembly


ANP1455-B
D104
CN16
T101
230V
115V
1.25A
T1.6A
CMK-140SX
RY101
FU101
FU102
AC SOCKET
AC POWER CORD
AC 240V
50/60Hz
G
AWR
AC(L)
AC(N)
AWZ
CMK-140SX
T102
POWER TRANSFORMER
CMK-140SX
MAIN1
MAIN1 GND
MAIN1
SUB
SUB
ELAC
MAIN2
MAIN2 GND
MAIN2

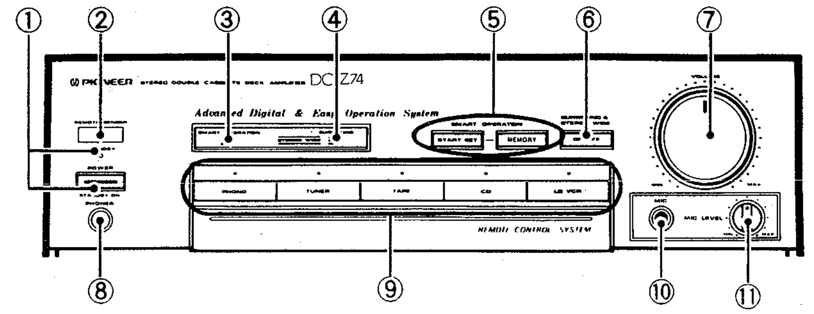
## SUB TRANS assembly (AWR1062)

## TRANS CONNECT assembly


ANP1254-B
CN16
D104
C103
C102
C101
D105
D106
D101
D102
D103
D107
D108
D109
D110
C104
C105
C106
C107
IC101
IC102
T.6A
T.25A
CMK-1405X
230V
115V
RY101
FU101
FU102
AC(N)
AC(L)
AWR
G
AW2
AC SOCKET
AC POWER CORD
AC 240V
50/60Hz
T102
POWER TRANSFORMER
CMK-1405X

# 5. PANEL FACILITIES

1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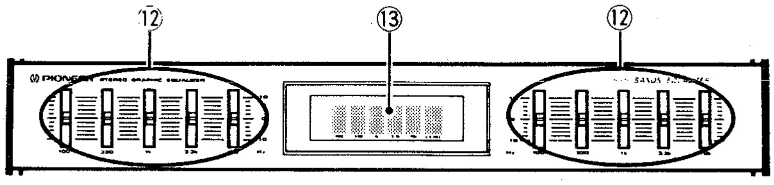
PIONEER
DC-Z74
Advanced Digital & Easy Operation System
PHONO
TUNER
TAPE
CD
LD VCR
REMOTE CONTROL SYSTEM

2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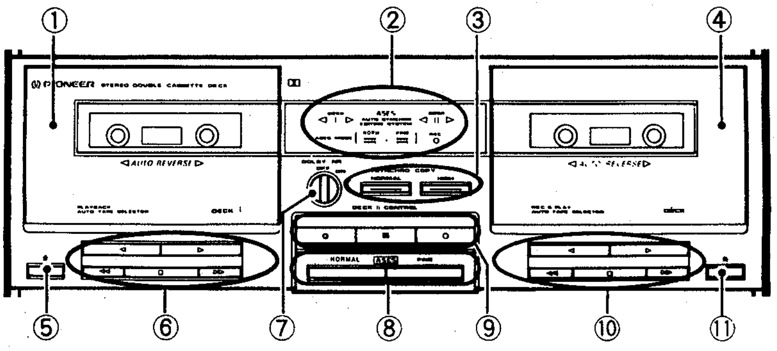
PIONEER

3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PIONEER

## ■ Amplifier section/Graphic equalizer section

See Fig 1, 2.

### ① POWER STANDBY/ON button/indicator

This is the button for electric power.

**ON:** When set to the ON position, power is supplied and the unit becomes operational.

**STANDBY:** When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.
The tuner section display indicates only the time.
The STANDBY indicator lights when the power is STANDBY, and goes out during ON.

### ② REMOTE SENSOR window

### ③ SMART OPERATION indicator

Blinks when the SMART OPERATION mode is set to ON.

### ④ SURROUND indicator

Lights when the SURROUND & STEREO WIDE is set to ON.

### ⑤ SMART OPERATION buttons

**[START/SET]**

To operate the SMART OPERATION function and set the data.

**[MEMORY]**

To set the data for SMART OPERATION.

### ⑥ SURROUND & STEREO WIDE button

In ON position, you can enjoy SURROUND sound reproduction when the rear speakers are used.
In ON position, when the rear speakers are not used, you can enjoy STEREO WIDE sound reproduction with wider left-right spread.

*NOTE:*
*SURROUND & STEREO WIDE effects cannot be obtained with a monaural signal source.*

## ⑦ VOLUME control

## ⑧ PHONES (Headphone) jack

For stereo headphones.

*NOTE:*
*There is no speaker output when headphones are plugged into the PHONES jack.*

## ⑨ Input selector buttons/indicators

| | |
|---|---|
| **[PHONO]** | Press to play records on a turntable connected to the PHONO jacks. |
| **[TUNER]** | Press to listen to radio broadcast. |
| **[TAPE]** | Press to listen to cassette tape. |
| **[CD]** | Press to listen to a compact disc. |
| **[LD/VCR]** | Press to listen to stereo component connected to the LD/VCR jacks. |

## ⑩ MIC (microphone) jack

This is a standard jack for connecting a microphone.

## ⑪ MIC LEVEL control

Used for adjusting the volume of microphone.

## ⑫ Graphic equalizer controls

Fine adjustments in sound quality are possible using the 5 controls on the graphic equalizer.

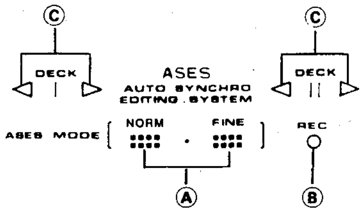
## ⑬ DISPLAY section

## ■ Cassette Deck Section

See Fig [3].

## ① DECK I cassette door

## ② Operation indicators



| | |
|---|---|
| **ⒶASES (NORM, FINE):** | Lights when the A.S.E.S. (Auto Synchro Editing System) is operating. |
| **ⒷREC:** | Lights when recording. Flashes when copying a tape.<br>Slow flashing = Normal copy<br>Rapid flashing = High speed copy |
| **ⒸDirection (◁, ▷):** | Shows direction of tape travel. |

## ③ SYNCHRO COPY buttons

Used for tape copying.

| | |
|---|---|
| **NORMAL:** | Copying from the Deck I tape to the Deck II tape at normal recording/playback speed. |
| **HIGH:** | Copying at about twice normal tape speed. (Copies can be made in about half the NORMAL time.) |

## ④ DECK II cassette door

## ⑤ Deck I eject button

## ⑥ Deck I Operation buttons

| | |
|---|---|
| ▷ **PLAY (FWD)** ······ | For playing back a tape in the forward mode. |
| ◁ **PLAY (REV)** ······ | For playing back a tape in the reverse mode. |
| □ **STOP** ··············· | For stopping the tape. |
| ►► **FAST** ··············· | Fast forward in forward mode, rewind in reverse mode. |
| ◄◄ **FAST** ··············· | Rewind in forward mode, fast forward in reverse mode. |

## ⑦ DOLBY* NR switch

Set this switch to the ON position to activate the DOLBY NR system.

- Tapes recorded using Dolby noise reduction should always be played back with the noise reduction system on. Sound quality will be adversely affected if played back with the system off, or if tapes recorded using a different noise reduction system are played back with the Dolby NR system on.
- It is recommended that tapes recorded with Dolby B type NR be so marked on the label. This will help prevent incorrect setting of the noise reduction button during playback.

## ⑧ ASES (NORMAL, FINE) button

Used for automatically recording a CD on cassette tape.

## ⑨ DECK II CONTROL buttons

| | |
|---|---|
| **REC MUTE ( ○ )** | Used for creating a blank space between songs. Pressing this button once creates an unrecorded 4-second space.<br>The unrecorded space is created for as long as this button is kept pressed during recording. |
| **PAUSE (⊏⊐)** | Temporarily stops tape travel. Cancels pause mode when pressed again. |
| **REC (●)** | To set to recording standby mode. Recording begins when you press the PLAY button (◁ or ▷). |

## ⑩ Deck II Operation buttons:

Same as Deck I operation buttons ⑥.

## ⑪ Deck II eject button

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* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ▯▯ are trademarks of Dolby Laboratories Licensing Corporation.

# 6. SPECIFICATIONS

## Stereo double cassette deck amplifier: DC-Z74

### Amplifier Section

**Continuously Average Power Output is 27 Watts* per channel, min., at 8 ohms from 40 Hertz to 20,000 Hertz, with no more than 0.4 %** total harmonic distortion.**

> * *Measured pursuant to the Federal Trade Commission's Trade Regulation rules on Power Output Claims for Amplifiers.*

DIN music power...... 50 W + 50 W (1 kHz, T.H.D. 1 %, 8 ohms)
Continuous Power Output (DIN) .......................... 33 W + 33 W
(1 kHz, T.H.D. 1 %, 8 ohms)
Peak Music Power Output ....... 350 W (1 kHz, T.H.D. 10 %, 6 Ω)
Graphic equalizer frequency band...................... 100 Hz, 330 Hz,
1 kHz, 3.3 kHz, 10 kHz, ±7 dB
Total Harmonic Distortion
(40 Hz to 20,000 Hz, 16.5 W, 8 ohms)** .... No more than 0.2 %

### Tape Deck Section

Systems.......................................... 4 track, 2-channel stereo
Heads......................................... Recording/playback head x 1
Playback head x 1
Erasing head x 1
Motor......................................... DC servo 2 speed motor x 2
Wow and Flutter......................... No more than 0.09 % (WRMS)
Fast Winding Time .......................... Approximately 105 seconds
(C-60 tape)
Frequency Response (−20 dB recording):
Normal tape ........................ 35 Hz to 14,000 Hz ±6 dB (EIAJ)
$CrO_2$ tape ........................... 35 Hz to 15,000 Hz ±6 dB (EIAJ)
Signal-to-Noise ratio
Dolby NR OFF................................................. 56 dB (EIAJ)
Noise Reduction Effect
Dolby B type NR ON ...................... More than 10 dB (at 5 kHz)

### Miscellaneous

Power requirements
Australian models .......................... a.c. 240 Volts~, 50/60 Hz
Other destination models
............ AC 110/120−127/220/240 V (Switchable), 50/60 Hz
Power Consumption ................................................... 216 W
Dimensions ............................ 360 (W) x 271 (H) x 307 (D) mm
14-3/16 (W) x 10-11/16 (H) x 12-1/16 (D) in
Weight (without package) ........................... 7.2 kg (15 lb 14 oz)

### Furnished Parts

Operating Instructions ....................................................... 1
Remote control unit ........................................................... 1
Dry cell batteries ............................................................... 2

- *Specifications and design subject to possible modification without notice due to improvement.*

** *Measured By Audio Spectrum Analyzer.*